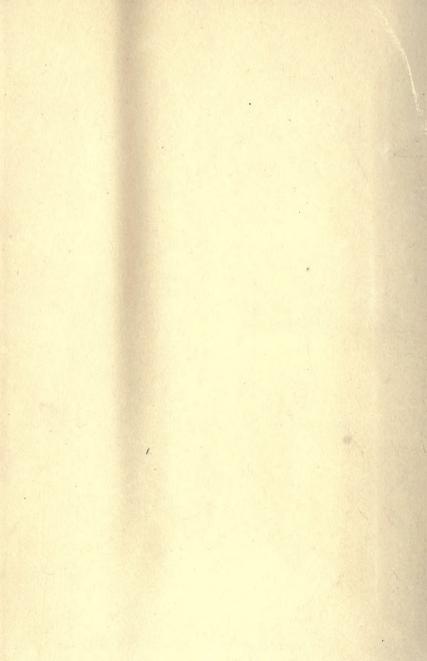
THE ILLINOIS SURVEY

L. D. COFFMAN



Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation

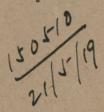


ILLINOIS SCHOOL SURVEY

A COÖPERATIVE INVESTIGATION of SCHOOL CONDITIONS and SCHOOL EFFICIENCY, INITIATED and CONDUCTED by the TEACHERS of ILLINOIS in the INTEREST of ALL the CHILDREN of ALL the PEOPLE



L. D. COFFMAN, Director

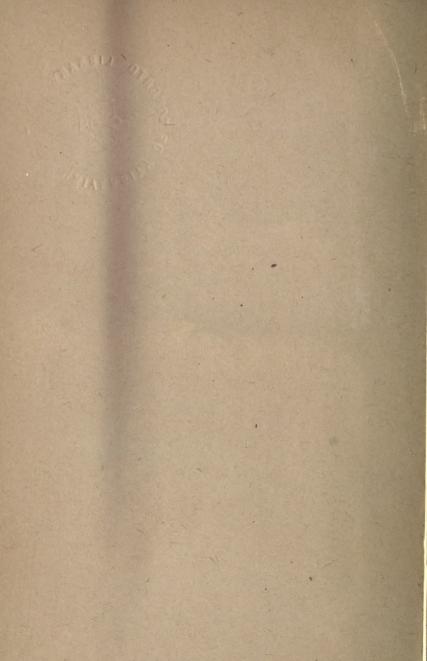


Published by Order of
The ILLINOIS STATE TEACHERS ASSOCIATION
1 9 1 7

Copyright 1917 by Geo. A. Brown

Table of Contents

			1	age
Introduction, L. D. Coffman,	-			5
The Economic Status of Teachers L. D. Coffman, -	in Illin	ois,	7.11	• 9
Program of Studies in Town and C Elementary Schools, W. C. B	Committee of the Commit	ded -	-	92
The Technique of Superintenden	ce, <i>L. D</i>	. Coffma	ın,	147
School Finances, David Felmley,		- 10		169
Student Population and Related P. Schools, J. A. Clement,	roblems	in High	-	185
Spelling Scores for Fifty-four Illino J. F. Babbitt,	ois Citie	s, -	-	223
Arithmetic Scores in Seven Illinois J. F. Babbitt,	Cities,		-	232
Some Exceptional High School Pu	pils in I	llinois,		
E. E. Jones, -				238
The Rural Schools, Forms,	-	-		276
Report of Caroline Grote,			4	295
Report of Edgar Packard,		-	-	330
Report of Joseph H. Hill,			-	349



ILLINOIS SCHOOL SURVEY.

In response to a resolution passed by the Illinois State Teachers' Association during the Christmas holidays of 1913, a conference of men and women representing every type of public education in the state was called to meet in the office of Francis G. Blair, State Superintendent of Public Instruction, January 31, 1914, to consider plans for carrying forward the work of the Survey. Those present at this conference were F. G. Blair, Springfield, David Felmley, Normal, J. W. Cook, De-Kalb, W. P. Morgan, Macomb, W. B. Owen, Chicago, L. D. Coffman, Urbana, W. C. Bagley, Urbana, D. Walter Potts, East St. Louis, G. P. Randle, Danville, G. D. Wham, Carbondale, W. R. Hatfield, Chicago, E. G. Bauman, Quincy, H. S. McGill, Jr., Springfield, G. W. Conn. Woodstock, Morgan C. Hogge, Chicago, Chester C. Dodge, Chicago, Thomas F. Holgate, Evanston, J. F. Bobbitt, Chicago, Mrs. Ella Flagg Young, Chicago.

The conference resulted in the appointment of the following executive committee: President David Felmley of Normal, Chairman, Supt. Hugh S. McGill, Jr. Springfield, County Superintendent Charles McIntosh, Monticello, Principal Morgan Hogge, Chicago. L. D. Coffman of Urbana was made ex-officio member of the

committee and director of the survey.

The executive committee decided to investigate each of the following phases of public education: (1) The children; (2) The teachers; (3) The program of studies; (4) The school plant; (5) Finances; (6) Organization, administration, and supervision; (7) The school and the community; (8) Conditions affecting vocational education; (9) The rural schools. A special

investigator was placed in charge of each of these divisions. Professor J. C. Clement of Northwestern University was appointed to investigate the student population, L. D. Coffman of the University of Illinois the teaching population, W. C. Bagley the program of studies, David Felmey school finances, J. F. Bobbitt organization, administration and supervision of city schools, R. C. Hieronymus the school and the community, C. H. Johnston of the University of Illinois, conditions affecting vocational education, and representatives of the normal schools at Normal, Macomb and Carbondale to investigate the rural schools and the school plant.

Mr. Joseph H. Hill, formerly president of the state normal school at Emporia, Kansas, was employed to investigate a number of representative rural schools in

eastern Illinois.

It was not possible to present complete and detailed reports upon all of these topics, partly because the investigators were not free to secure the information at first hand, and partly because of limited resources. Moreover, some of the data which were supplied by school authorities did not result in reports of permanent value. This is particularly true of the material relating to conditions affecting vocational education and to the relationships existing between the school and the community. The reports upon the other topics are herewith submitted.

It is a matter of regret that it was not possible to present reports so detailed, comprehensive and thoroughgoing as was originally intended. The committee was handicapped not only by a lack of funds, but by the failure of certain agencies to coöperate with the movement and by the unfriendly attitude of certain members of the teaching force. Had all of these various agencies coöperated in the work and had the various investigators been free from their regular university duties, it would have been possible to present a series of re-

ports treating various aspects of public education in the state of Illinois in a comprehensive manner. We are convinced that improvements in educational practice and the introduction of new forms of organization as well as practically all matters involving legislation should be the result of careful investigation rather than mere opinion. For this reason therefore, we feel that it would be a wise thing if the State Teachers' Association would take a specific topic each year for investigation and if the results of that investigation might be published in the *Illinois Teacher* and thus brought to the attention of the various members of the State Association.



*THE ECONOMIC STATUS OF TEACHERS IN ILLINOIS

L. D. Coffman*

I

INTRODUCTION.

OBJECT OF THE STUDY

Every thoughtful adult has an opinion concerning the training, the fitness, and the financial situation of the teachers in his or her community. If the community is of small territorial area, this opinion might be a fair one; for in a village or rural district, an intimate acquaintance exists between the teacher and the people. If, on the other hand, that thoughtful adult makes his home in the city, his opinion in regard to the teacher's economic situation and professional fitness would be vague and narrow, if, for his evidence, he depends upon his own observations which usually do not extend bevond the classroom life of the teacher of his child.

This study is intended to acquaint the people of the state of Illinois, with the economic problems confronting their teachers. The facts related here are the results of an investigation into the training, the fitness, and the economic status of a seventh of the teaching population of the state, and the opinion which the reader gathers

^{*}The author of this report is indebted to a number of graduate students and particularly to Miss Olive Paine, for assistance in preparing this report.

from these pages, will have the support of an unprejudiced statement based upon hundreds of cases. A personal opinion has thus given way to well grounded conviction. Such conviction, however, would be of slight value unless it were put to some good use.

A second, and more important object than that of establishing conviction upon firm foundation, has been to provide a means of comparing the teaching factor of one school system with that of another. Through comparison, the weaknesses of our system are brought to our attention. Through comparison, also, its strong points are made prominent. We may properly take pride in what is shown to be excellent; but we may with justice be censured for adhering persistently to that which indicates a low grade of efficiency.

The third, and the most important of all the objects of the study, finds expression in the hope that certain conditions brought to light through this investigation, will awaken the citizens of the state to the need of inaugurating certain reforms.

METHOD OF INVESTIGATION

In the spring of 1914, a state-wide survey of the teaching population of Illinois was attempted. Question-naires upon the various school activities were composed and sent to practically all the superintendents of the state to be distributed among their teachers and pupils. The data relating to the teaching population which are shown in the tables that follow, were collected from the questionnaires which the teachers themselves filled out. The reader will notice that no names appear upon the question forms so that identification is entirely impossible. The form of the questionnaire is as follows:

ILLINOIS SCHOOL SURVEY

A COOPERATIVE INVESTIGATION OF SCHOOL CONDITIONS AND SCHOOL EFFICIENCY, INITIATED AND CONDUCTED BY THE TEACHERS OF ILLINOIS IN THE INTEREST OF ALL THE CHILDREN OF ALL THE PEOPLE

TOPIC II. THE TEACHING POPULATION

FORM B

Return to Lotus D. Coffman, Director of Survey, Urbana, Ill. Teachers are requested to check (X) or underscore where it is possible. They are also requested to exercise care in answering the questions and to make an effort to answer them all. These questions need not be answered by principals, supervisors, or superintendents. A special form will be prepared for them. If you teach in the country, give the name of the county in which you teach; if in town, give the name of the town; if in a city, give the name of the city...... a. State the approximate population of the village, town, city or district in which you teach..... Man or woman..... Age at nearest birthday..... In what state were you born?..... In what country?..... Where did you you grow up? country, village, or city (underscore)? Native language of father..... of mother 5. Father's occupation when you began teaching..... 6. 7. Total number of brothers and sisters, not counting yourself, at the time you began teaching..... Check item that most nearly represented the parental income when you began teaching: \$250 or less. \$250 to \$500. \$500 to \$750. \$750 to \$1,000. \$1,000 to \$1,250. \$1,250 to \$1,500. \$1,500 to \$1,750. \$1,750 to \$2,000. \$2,000 or more.

9.	Was your father alive when you began teaching?
10	Was your mother alive when you began teaching?
10.	Salary per month this year
11.	Number of months you will be paid this year
12.	Underscore the position you hold and the grades you teach. Rural school teacher.
	Kindergarten teacher.
	Primary teacher (grades 1, 2, 3).
	Intermediate teacher (grades 4, 5, 6). Grammar grade teacher (grades 7, 8).
	High School teacher. What subjects do you teach?
13.	Age (nearest birthday) at which you first began employ-
10,	ment as a teacher
14.	Number of country schools taught in
AT.	Number of years in country school
	Number of town schools taught in
	Number of years in town schools
	Number of city schools taught in
	Number of years in city schools
15.	Different grades taught in town or city schools
16.	Number of years studied in high school
	Number of years studied in normal school
	Number of years studied in college or university
17.	Have you a diploma from the normal school?
	What degree do you hold?
	From what institution?
18.	Indicate the amount of schooling you have had since you
	became a teacher
	Number of weeks
	Normal school
	Extension Course
19.	What certificate do you now hold?
20.	To what professional magazines are you a subscriber?
۵0.	10 what professional magazines are you a subscriber
	What books have you read during the past year?
	That books have you read during the past year
21.	Do you do your own janitor work?
21.	· · · · · · · · · · · · · · · · · · ·
	NOTE TO THE TEACHERS. The questions that follow are
	of a more personal and intimate character. As the
	teachers are not requested to sign their names they need
	have no fear about their identity being disclosed. The facts called for by these questions are obviously so im-
	racis cancil for by these questions are obviously so im-

	portant that it is hoped that no teacher will decline to answer them.
22.	What sources of income do you have other than your salary
	as a teacher? List them and indicate the approximate annual income from each.
	Sources Annual Income
23.	What and how much life insurance do you carry?
0.4	Ougstions for approprial toochers.
24.	Questions for unmarried teachers: Are you teaching in your home district?
	Do you live with your parents?
	How far from the school house do you room?
	Do you "keep house"
	Do you have a separate and warm room?
	How much board do you pay?
	Do you usually spend Saturday and Sunday in the district where you teach?
25.	Questions for married teachers:
	Do you own your own home?
	Has insecurity of tenures been a factor in preventing from
	owning your home?
	What rent do you pay?
26.	How many children do you have?
20.	Number of persons dependent upon teachers: a. Dependents under twenty-one years of age.
	1. Male
	2. Female
	3. Totally dependent
	4. Partially dependent
	b. Dependents over twenty-one years of age.
	1. Male 2. Female
	2. Female
	4. Partially dependent
	c. What share of your annual salary do you contribute to
	their annual support?
27.	How much do you spend annually for reading circle books,
	professional magazines, institutes, and teachers' meet-
28.	logs?
60.	How much have you been able to save from your annual salary during each of the last five years?
	samely during each of the fast live years

29.	Since you became a teacher what traveling have you done for recreation and improvement?
30.	Indicate how you have disposed of your time during each of the last three summers (if you have been teaching so long). First summer Second summer Third summer
31.	If possible, will you give a rough itemized statement of the disposition of your annual salary? Clothing Food Room rent Laundry Doctor Dentist Charity Recreation Savings
32.	Have you secured any of your positions through a teacher's agency? If so, what part of your salary did you pay as a commission?
33.	Has the normal school or college or university of which you are a graduate ever directly aided you in securing an appointment?
34.	List, if possible, the number of times you have been absent from the schoolroom during the last two years on account of sickness. Is the schoolroom particularly injurious to your health? If so, in what particulars?
35.	What motive induced you to enter teaching?
	What motives keep you in teaching?
36.	Do you look forward to teaching as a permanent career?
37.	About how many hours do you spend each day outside of regular school hours in the preparation of lessons? the grading of manuscripts the collection of materials

38.	
	church and the Sunday school? Are
	you expected or required to do this? (underscore).
39.	Please write below any additional remarks you may wish
	to make

DISCUSSION OF THE QUESTIONS

Inspection of the questionnaire shows that there are but three questions, the 8th, the 26th (c), and the 31st, which call the judgment into action. The others involve memory simply; yet there were many failures to answer even the easiest questions. It is difficult to find an adequate reason for not telling the native language of the father or mother, one's present age, the childhood environment, or the different grades taught in town or in the city. Nevertheless, blanks were often found after questions of this character. Some omissions must have been from oversight, as, for example failure to denote the sex. Others were made on the grounds that the questions pried disagreeably into the teacher's private affairs. Still others occurred because the teacher could not see what bearing the question had upon the problem, and therefore refused to answer it.

In several cases there was a misunderstanding of question 14. Answers to "number of years" in country, town, or city schools, seemed to include attendance as a

pupil together with that as a teacher.

Those answers based upon personal judgment are obviously open to error. Many teachers frankly stated that they did not know the parental income, and that they had no system of accounts by which they could compute their expenses. Others made a conscientious attempt to judge fairly; and, in comparison with other studies which touch upon this subject, the errors in this

¹L. D. Coffman: The Teaching Population. p. 50.

study seem to be not very great. Some women have probably judged too high, but more women than men failed to answer. This can be explained by sex differences; the women, being more inexperienced in estimating money values, are therefore, reluctant to make an estimate which would perhaps be ridiculously far from the mark.

It might seem that there would be error in classifying town and city districts; but by using the United States census basis of 2.500 as defining the population of

a city, error here is largely reduced.

"Number of years in normal school" was often answered in terms of summer school sessions. If they were six-week terms, four were allowed for one year; if they were twelve-week terms, three were considered equivalent to a regular school year. For fractional parts of a year in normal school or college, thirty-six weeks were taken as the standard length of a school year.

EXAMINATIONS.

Blanks were discarded for obvious incorrectness in the answers and for gross incompleteness. This forces an elimination of about a hundred replies. Therefore, out of approximately 4,475 returns, 4,339 have been used in this study.

ATTITUDES OF TEACHERS TOWARD THE INVESTIGATION

The attitudes of the teachers towards the survey present a surprising variety. That there should have been any except that of interest in the welfare of "all the children of all the people" as well as in behalf of all the teachers of all the children, has made the work of conducting the survey more difficult, and the question of its probable success more grave.

The attitude displayed most often is that of indifference and it makes itself felt by the carelessness in which the questionnaire is filled out. Glaring errors in the statement and slovenly and unfinished reports are the results. No sign of endeavor to answer faithfully the most difficult questions is evident. Indifference is also manifest by flippant answers and painful attempts at jokes and witticisms which destroyed the worth of such records.

There is another group of teachers who felt insulted by being approached with such questions. Reports like these, "it is none of your business," "too private to discuss," and "my personal affair" indicate their injured or defiant attitude. Furthermore, some teachers expressed the feeling that they were too busy to be bothered with such time-consuming records when immediate reward for such exertion was uncertain. That some believed that the questionnaire was prompted by idle curiosity on the part of the investigator was shown by such replies as "We know that you can tell who we are if you want to"

A large percentage of the teachers, however, embraced the opportunity to coöperate in making the survey a success. The reports from these show careful and conscientious attempts to answer correctly and completely. This attitude of helpfulness is expressed also by their inquiry, "Have I made this out all right?" "Have these answers of mine added anything of value to the survey?" "I hope that I have been able to give you what you need in your work." These teachers have the gratitude of the investigators, and, if we really could identify them, they would receive an expression of our appreciation.

METHOD OF TABULATION.

For convenience in handling the data, it was necessary to copy the reports into the form of an initial table from which the data for the detail tables could be readily gathered. This was the first, long task occupying

many, many hours of wearisome toil. It is no insignificant piece of work to tabulate 4,339 records each having a possibility of ninety-nine answers, making a total of

approximately 430,000 items.

To make the initial table compact in form and also to reduce the labor of copying to the least possible amount, cross-ruled note books were used and a code of figures and abbreviations was adopted. For example, in question 4a, 1 stands for country; 2 for town; and 3 for city. If one had lived in the city but later moved to the country, the record would read 3, 1. There are nine groups in question 8, and a figure in the series from 1 to 9 denotes the group which includes the parental income. A similar method is used in tabulating answers to question 12. In question 9 and 9a, 1 is used if the parent is living; 2 if deceased; 0 if the parent is not mentioned.

Occupations were classified into eight groups and the figure is used in place of its group name. By this scheme, we have (1) farmers, (2) professional men, (3) business men, (4) artisans, (5) laborers, (6) public officials, (7)

retired, and (8) invalids.

The abbreviations used for native language and birthplace in questions 4 and 5, need no explanation.

Although the labor of copying the questionnaires was tedious, it was not void of interest. Each record represented the individual problems confronting the teacher and with each record a new history began. One may search through the lists, but in all records, no duplicate will be found. Moreover, here and there were amusing statements and bits of fun, more appreciable because they were unintentional on the part of the one who wrote them.

In order that the reader may understand how loaded the records are with matters of social, economic, and professional interest, a sample from the initial table is submitted.

wn sols	Years	0	100	22	Ø	က	26	0	-16	4-0
Country Town Schools	No. taught in	0	0	0	0	63		0	₩ 00	
try	Years	0	ō	0	0	9	-	0	বাব	800
oun	No. taught in	0	0	0	0	63	-	0	40	000
	Beginning age	23	18	10	21	18	18	12	119	255
	Grade of School	9	10	2	9	4	co	4	ကက	444
	No. of Months	10	01	a	0	10	6	3,6	60	000
ary	Per Month	\$143	0.0	20	122 1/2	0.2	09	99	52 1/2	62 1/2
Living	Мотрег		-	-	=	-	I	-		
-	Father	-	H	-	н	-	H	-	463	- 03 -
	No. of Brothers and Sisters	63	=	7	က	63	63	70	10.4	10 1- 6
-	Parental Income		5	63	20	10	4	-	4	40
	Parental Occupation	60	4	1	60	೧೦	2	7	∞ ⊷	60 E
Native Language of Parents	Мотнет	Eng.	Ger.	Eng.	Ger.	Eng.	Eng.	E E	Eng.	Eng. Ger.
Lan of P	Tadta	Ger.	Ger.	Ger.	Nor.	Eng.	Eng.	Eng.	Eng.	Eng. Ger.
	Childhood Environment	3	600	63	63	83	23	-	-103	000
	Вітth рія се	Iowa	Mich.	III.	S. Dak.	II.	III.	Ħ	III. Scot.	Kans.
	95 V	2	47	42	24	30	45	44	25	30
	xəS	Eq.	1	E	M	F	S	F	压压	F (F) E
	vio do esis	250T	35H	16T	28T	25T	10T	35T	6T 25T	8T 15T
	Teaching Location		42	40	9	9	4	υ	ت مه	ا میامیا
	Number	10	54	89	710	717	45	50 50	28	23 53 60 44 60 0

		to annomy.	\$1000	1000	0	4000	0	1000	1000	00	00
		Janitor Work		No	no	yes	no	no	no	no	ou
		Business Poetry									
	-	Sociology	-							н	×
ling		Religious Philosophy								ĸ	×
Reading		Professional Ragazines	9	62				4	H	×	××
	оокв	Fiction Textbo		M	ಣ	н	ĸ				×
	.forq o	Subscribers to	67	. 03	62	=	0		-	H	63
Since Teaching		Certificate	Lmt. in Phy.	Edu. Life	First	2	State	First	2	2nd grade	First
Теа		Extension			0	0		×	72	36 x	
nce		College		80	0	0					
SZ	lam:	Weeks in Nor Sch.			0	0	72	12	0	0	12
		Institution	Chi.	Mich.		Wis.	0		0	0	·
	6	College Degree	Yes	Ph.B Mich	0	A.B.	0	0	0	0	0
Preparation	ī	Normal Schoo Diploma	No	yes	no	ОÜ	yes	no	no	no	ou
eba		College	4	63	0	4	0		0	С	00
Pr		Normal		02	0	0	6.2		-	0	100
		High School	4	4	4	ಣ	ಣ		4	4 4	44
	səp	Different dra ni thgust		73	Ď.	4	∞		ro	€ 4	03 03
Ils		Years	21/3	24 1/2	0	ಣ	Ħ	0	55		
City	mi 31	Number taugh	10	4	0	Н	H	0	н		
20		Number	10	54	89	719	717	45	35	28	723

Totally dependent upon Teacher	F.emale	0	0	0	0	0	0			00	0
depe up Tea	Over 21 Male	0	0	0	0	0	•			00	0
ied	Pennale	0	0	0	0	0	0			00	0
Married	No. of Children Under 21 Male	0	0	0	0	0	0			00	0
	Rent Paid						10				
	Own the Home						Ноше				
				exp.			Own				
	Board Paid	\$16	all	house exp		\$20			0	\$300	000
rried	Separate Room	yes	:	2		=,			yes	=	
Unmarried	Keep House	no	yes	no	по	011	ves.		yes	0u	ou ou
	Distance from School	7m	3bl	1m	1/2 pl.	1 1/2 "	9		" 9	17m	10bl.
	sovitalor ditw ovid	No			no	no	ou			res	
	Live with Parents	No	yes	33	ou	no	no		yes	yes	yes
	Saiwed						,				
	Rents			н							×
0	Housework				×						
com	qidansisitri.										
In	Farming						н				
Sources of Income	Investments				×						
urce	TutorinT										
So	Amount of income, not salary	0	0	09	200	0	Not sta.	-	0	00	195
	Rumper.	10	54	89	719	717	45		35	741	4600

82.10	• bxidT	Rest	:	*	Sur.	i	Study	West	Home		L. Mich. Sch.	
Summers	puoseg	Rest	*	Canv.	Work		Nurse	North	Home	::		
	\$ari'A	Rest	•	22	Far'g		Rest	Ноше	**	vis'g	L. Mich.	ap
	Short Trips		н	н	0		н	н		нк		Can
	South		-		0							Vis'g camp
To l	Rockies				0			н				
Travel	Abroad	×	ĸ						H			-
	Pacific Cosst				0							×
	Atlantic coast	×	×		0							
	stast & ni bevas	\$300	.330		1300		009		0	500	200	200
	Amt. books, etc. magazines, etc.	\$10	10	2	က		23	0	20	10	0	100
	Part of salary devoted to them	0	\$120		200		0	0	400	00	0	3%
	Female	0	 1	63			0	0		00	0	-
ly dent	Under 21 Male	0		1	1		0	0		00	0	
Partly dependent	Female	0	0				0	0	1	00	0	11
	12 19vO		0	0			0	0	-	00	0	
	Митрет	10	54	89	719		717	45	35	741	42.0	732

Motive	For Consinuing Teaching		Money	hEnjoyment	Money	Money	Necessity	To be useful	To be useful	Money
Mot	Por Entering ParidoseT		Money	Mother's wishEnjoyment	Money	Money	Father's influence	To be useful	Influence of	To be busy Money
	Schoolroom injuries fwoH	0	0	no	Catarrh	ness				
	Absent (times) in Syears	0	0	0	yes	0	110	yes	n0 n0	n0 n0
Health	es ni sided in se- curing position	0u	yes		по	yes	0	-	007	10
H	% of salary commission	0	0	0	5%	0		уев	no no	yes
	Member of teachers	Yes	Yes	No	yes	110		no	000	no
	BanivaS		110	130	400	250	3000	0		200
	Recreation		25	09	220	9.0		0	75	O++ O++
	Charity		40	2	10	10	0	. 0	20	63 70
	Dentist		23	10	20	70	20	25	0	10
Sea.	Doctor		23	10	10	ro.	0		0	10
Expenditures	Lsundry		25		20	20			0	0
Expe	Rent		200		120	100		0	0	190
	Food		50	09	20	180		0	0	
	Clothes		54 160 150		100 150	-		125	125	100
		10	54	89 100	119	717	45	35	28	723

	Remarks	Father's business income is not known to me	Work in previous years has been	much narder			\$200 on an Insurance Policy. Until I was 30 yrs. old—helped brothers through college. Wages always went to Father. I never	my money or bo	strength for school.		
Work	Required		no	no	0u	ou	no	ou 0	0 U	ou	no
Church Work	Is this expected		no	no	no	no n	no 1	no on	no r	no r	no
-	ti ni tnoqe sruoH		H	62	23	က	0	0	20 20	10	3
	Visiting s ick pupils		1/4	1	1		0			x 1	
ide of ent	stnersq znitisiV		7%	J	ı		0			×	
Hours outside of school spent	ersqing papers		ŀ	1	1 1/2		0		22.2	3/2	1
Hou	Ollecting Jeirotem		**	1/2	occasional		0		1/2 Much	Varies	
	Preparation of anosasi			H	23	87	0	63	11/2	1	1
	as teaching to be a rectrible to be a rectrible.	Yes .	Yes	Yes	No	1	Yes	Yes	No	Doubt'l	No
	Number.	10	54	89	719	717	45	80 10	28 741	24	- 1

THE TABLE SHOULD BE READ AS FOLLOWS:

Number 10 is a woman, twenty-five years of age, who teaches in a city of two hundred fifty thousand population. She was born in Iowa and spent her childhood among city surroundings. She is of mixed parentage, the father being German, the mother English. The father is a business man but his income is unknown to his daughter. There are two other children in the family, which since the father and mother are both living, consists of five people.

Number 10 teaches in the high school ten months in a year, receiving a salary of \$143 a month. She began teaching at the age of 23 years. The statement that she has worked in fifty schools points to the fact that some of the work has been of a supervisory nature. Preparation consists of four years in high school, and four in college—the University of Chicago. There has been no formal training. Her certificate is limited and applies

to Physical Education.

Number 10 subscribes to two professional magazines. Other reading has, during the past year, been of a professional nature.

This teacher carries an insurance of \$1,000. She has no source of income other than her salary. As for her economic problems, they are not great. She boards seven miles from her school, with people not related to her and pays \$16 per month. She has no one depending upon her for support; \$10 of her salary she spends for professional institutes, books, magazines, etc. In five years she has done no traveling and her summers, for the last three years, have been given to rest. She does not state the distribution of her salary among the items of expenditures.

Although a member of a teachers' agency, she has never been under obligation to it. In the last two years. Number 10 has not been absent from school. She does

not find the school room injurious to her health. She does not state the motive for which she entered the teaching, nor that for which she continues to teach, but she intends to make teaching her permanent work. Probably she is not busy with school work outside of school hours or some mention would have been made of the fact. It is probable, also, that she is not engaged in church work.

II

THE CHILDHOOD ENVIRONMENT

INTRODUCTION.

In order that one may have a fairer point of view of the present status of the Illinois teachers, it is important to understand some of the home influences which surrounded them before their professional careers began. This chapter deals with those larger factors of environment,—the birthplace, the language spoken in the home, the parental income and occupation, and the size of the family.

BIRTHPLACE.

In dealing with the data concerning the place of birth, it did not seem that significant results would follow from a separate distribution for men and women. Therefore, those records in which sex was not denoted are included in this table, making a total of 4,339.

Table II shows how far outside of state boundaries Illinois gathers her teachers.

Besides fifteen foreign countries, thirty-seven states, not including the District of Columbia, are reported as being the birthplace of our teachers. By far the greatest number are native to Illinois; 3,326 teachers, or 75 percent of those reporting, were born and bred in this state. Indiana ranks next, sending us 143 teachers, or 3.2 percent of those reporting. Nearly 2 percent are of foreign birth.

TABLE II.—SHOWING THE DISTRIBUTION OF TEACHERS ACCORDING TO BIRTHPLACE.

Place	Frequency	Place	Frequency
Not named	9	Me	4
	3326	FIN	4
Indiana	143	70 1	2
Ohio		T) 1	2
Mich.	93		
Iowa	96	201	
Wis	87	Ark	2
Mo	74	(1)	
New York		N. Car.	
Neb	54	R. I	
	53	W. Va	
Ку	37		1
	37		1
Mass	23	Switzerland	1
Canada	17	Ga	1
S. Dak	15	Nev	1
Germany	12	TTT	1
Minn	13		1
Col		Belgium	1
Tenn		Okla	1
England	7	Norway	1
Sweden		Ireland	2
Md	9	Holland	1
Vt	6	Austria	1
	4	D. C	1
Calif	4	Foreign (not)	designated 19
N. Hamp	3		
Scotland	4	Total	
N. Mex	2		

The general tendency of the population to migrate from the east to the west is shown in the mobility of the members of the teaching profession. Nearly twice as many teachers have come to Illinois from the east as from the west. But the reader will observe that most of those migrating toward the east are from adjoining states. Of the pronounced migrations, 27 percent are eastward; 72 percent are westward.

ENVIRONMENT.

The childhood environment (answers to question 4a), is tabulated in Table III which should be read as follows: 154 teachers failed to answer this question; 1.299, or 30.6 percent of the teachers reporting, lived in

the country until they began teaching; 771, or 18.1 percent, lived in town; and 1,884, or 44.5 percent, in a city; 1.60 percent have lived in both city and country; 145, or 3.21 percent, have lived in country and town; and 31, or .01 percent, in country, town and city.

TABLE III.—DISTRIBUTION OF TEACHERS ACCORDING TO CHILDHOOD ENVIRONMENT.

Location	requency	Percent
Unanswered Country Town City Country and City. Country, Town and City Country and Town City and Town	154 1299 771 1884 76 31 145	30.6 18.1 44.5 1.66 .31 3.21
Total	4398	100.00

NATIVE LANGUAGE OF PARENTS.

The fact that the teaching profession attracts all nationalities is impressed upon us by a study of Tables IV and V. Here are found the distributions on the basis of the language spoken in the homes of our teachers. Thirteen different languages are native to the parents of the men. As one would expect, the first rank is taken by the English, 83.6 percent of the parents belonging to this class. Next come the Germans with 11.5 percent and other nationalities constitute 4.9 percent.

TABLE IV.—THE NATIVE LANGUAGE OF THE PARENTS OF THE MEN TEACHERS.

			•
Language	Fathers	Mothers	Total
Not named	7	6	13
English		481	950
German		61	131
French	2		2
Swedish	7	13	13
Dutch	2	2	福

Danish	******	8 8	В
Irish		1 2	3
		4 2	6
		1 2	3
		1	1
		1 1	2
		1 1	2
Hungarian		1 1	2
	5	70 570	1140
	glish speaking parents,	83.6	
	rman speaking parents,	11.5	
Percent of oth	er nationalities,	4.9	

TABLE V.—THE NATIVE LANGUAGE OF THE PARENTS OF THE WOMEN TEACHERS.

Language		Fathers		Mothers	Total
Not Answered		73		77	150
English		3038		3091	6123
German		385		358	743
Swedish		135		130-	265
Irish		. 49		47	96
Scotch				32	68
				24	50
				21	47
				7	21
				12	19
~ .				8	8
				8	19
				2	- 6
				5	10
				ĭ	2
				ĝ	4
				ī	1
~ **				1	5
Scandinavian				i	2
				i	9
Daliah				2	20
Polish		2		2	-48
		3824		3824	7648
Donasant of Wa	glish speaking pare		80.		
	man speaking pare		9.56		
			3.32		
	edish speaking pare		1.27		
rercent of Iri	sh speaking parents	9	1.27		

There is a greater variety of language among the parents of the women teachers, due largely to the fact that there are eight times as many women reporting. Twenty different nationalities are represented, and their distribution is shown in Table V. Here again the sig-

nificant percents are claimed by the English and the German speaking parents, with appreciable figures for the Swedish and the Irish. These percentages are nearly the same as those found in an earlier study. The comparison is as follows:

The Illin	ois teacher.	
Percent	English,	80
11	German,	9.56
"	Swedish,	8.22
,,	Trish	1.27

The American teacher. 79.5

From these comparisons, we may conclude that in regard to nativity, the Illinois teacher is similar to the typical American teacher. This diversity of nationality, however, complicates the problem of training the teachers for the schools. Accent, idiom, and correct grammatical forms, difficult enough for a natural born English speaking man or woman to acquire, are still more difficult for one in whose home a foreign tongue is spoken.

PARENTAL OCCUPATIONS.

Four hundred and twenty teachers failed to tell the parental occupation. Nevertheless, this is not a true index of their reluctance to answer this question, or of their carelessness in filling out the blank. A deduction must be made for the deceased fathers. Table VI shows this condition of the family.

TABLE VI.

		eachers Mothers		Teachers Mothers
Not answered	1	n	4.8	23
Not living	86	56	607	989
Living	482	513	8012	3298
	569	569	3712	3712

¹L. D. Coffman: The Social Composition of the Teaching Population: p. 59.

Some teachers stated the employment of the supporter of the family when the father was not living and such reports are included in the distribution.

As one would expect in an agricultural community, the occupation engaged in by the largest percent of the parents is farming. The artisan class ranks next; the business men, third; and the unoccupied, fourth; Table VII shows the frequencies and percents for each occupation.

TABLE VII.—DISTRIBUTION ACCORDING TO PARENTAL EMPLOYMENT.

Occupation	Total	Percent
Not answered No occupation Farming Artisans Business Professional Laborers Public officials Retired	568 1216 816 690 280 138 104	14.3 30.5 20.5 17.4 7.5 8.4 2.6
Invalids ·		100.

Comparison is again made with Dr. Coffman's conclusions in regard to parental employment. The occupational groups for the American teacher rank as follows:

Occupation		Percent
Artisans		14.4
	en	
	*** * * * * * * * * * * * * * * * * * *	
Invalids		001

¹Coffman: The Composition of the Teaching Population; p. 73.

INCOME.

The first striking item in regard to incomes shown in Table VIII is the large number of women failing to answer the inquiry about parental income at the time their teaching experience began. About one-third of the women and less than one-ninth of the men evade this question. This is a pointed reminder of the fact that in many families, the women fail to share with the father the business responsibilities which concern the home.

TABLE VIII.—DISTRIBUTION OF TEACHERS ACCORDING TO PARENTAL INCOME.

Income	Men	Women	Total
Not answered		1025	1086
No income	19	216	235
\$250 or less	52	144	196
\$250 - \$500	81	264	345
500 - 750		365	445
750 - 1000	81	473	554
1900 - 1250		488	555
1250 - 1500		178	204
1500 - 1750		109	131
1750 - 2000		152	180
2000 or more		349	402
Total	570	3763	4333

" women, \$795.47

Range of the 50 percentile, men, \$418 - \$1270
" " women. \$504 - \$1464

Since we have found that there is a large group of unemployed among the parents, we were prepared to find that a large number therefore, have no income. For those having income, the median for the men is found to be \$809; for the women, \$795.47. Fifty percent of the cases of the men lie between \$418 and \$1,270; while the range of the 50 percentile for women is from \$504 to \$1.464.

This median for men is \$170 higher than that of Dr. Coffman for the typical American teacher; and this median for women is \$17.65 lower.

TABLE IX.—SHOWING THE RELATIONSHIP BETWEEN THE BEGINNING AGE OF WOMEN AND THE PARENTAL INCOME.

,	Total 2018 1200 1200 1400 1400 1400 150 150 150 150 150 150 150 150 150 1	
	\$2000 or more 10 11 15 22 22 23 44 49 49 15 77 77 77 77 77 78	-
	\$1750- 2000 2000 120 111 1111 1111	
	\$1500- 1750 16 21 8 8 3 3 11	1
	\$1250- 1500 11 11 11 16 16 11 1	-
INCOME	\$1000- 1250 1250 100 100 113 113 113 111 111 111	
I	\$750- 1000 1000 116- 116- 29 29 29 29 20 20 20 11 11	-
	\$5500- 750- 1069- 106- 1	
	\$250. \$500 \$64 \$42 \$11 \$12 \$23 \$11 \$23 \$23 \$23 \$23 \$23 \$23 \$23 \$23 \$23 \$23	
	2000 1000 1000 1000 1000 1000 1000 1000	
	No income 11.4 + 1 11.4 + 4 11.4 + 4 11	
	11111022222224 4221102222222220 42210222222220	

A larger percent of the women than of the men come from homes where the parental income is \$2,000 or more. This indicates that the boys in these families find some other profession more attractive and can prepare for it.

At first thought, one would say that where the income is large, the period of training would be longer, and entry into the professional career deferred. The results in Table IX do not warrant such a conclusion. It is true that in the two cases where teaching began at the age of fourteen and fifteen, the income was less than \$250. In general, however, it makes little difference whether the income is nothing, or whether it is \$2,000 or more, the beginning age clusters around eighteen and nineteen.

SIZE OF THE FAMILY.

Another important environmental factor lies in the size of the family. An examination of Table X shows

TABLE X.—DISTRIBUTION ACCORDING TO THE NUMBER OF BROTHERS AND SISTERS.

Number	Men	Women	Total
Not answered	6	55	61
Having none	24	222	246
1	62	484	546
2	91	654	745
3	84	631	715
4	98	525	623
5	54	437	491
6	58	303	361
7	38	212	350
8	23	125	158
9	20	72	92
10	9	23	32
11	3	19	22
1274	1	6	7
13	î	~	1
14	-	1	1
A			
	570	3769	4339
Median, men 3	010	0100	4000
Median, women 3			

that for men, the number of brothers and sisters ranges from one to thirteen; for women, from one to fourteen. The mode for men is four, and for women, three; while the average for men is four and for women one less. For both men and women, the median is three. Adding one to the median number of brothers and sisters for the reporter, and two for the parents, the size of the family is found to be six. This is larger than the average sized family for the United States, which in 1900, was four persons; but it is one less than the size of the family of the typical American teacher.¹

Reviewing the factors of childhood environment, we conclude that the representative Illinois teacher is native to the state, of English parentage, and was bred in either rural or urban surroundings. The parental income, gained from agriculture or artisan pursuits, is about \$800 which must support a family of six persons, until the sons and daughters who are to become teachers are nineteen years old, when the professional career be-

gins.

¹Coffman: The social Composition of the Teaching Population. p. 69.

III

THE PROFESSIONAL LIFE OF THE ILLINOIS TEACHER

Under the title-heading of this chapter, the writer attempts to show the extent and the kind of training received in preparation for teaching; the motives for which this profession was chosen; the age when the professional career began; the amount of experience in country, town, and city schools; the number of grades taught: the length of the school year; and the teacher's salary.

PREPARATION.

The professional life of any person can be judged more appreciatively after an examination of the amount of training he has had. The amount of high school education that Illinois teachers have received is shown in Table XI—372, or 64 percent of the men, and 3.359, or

TABLE XI.—DISTRIBUTION ON THE BASIS OF HIGH SCHOOL EDUCATION.

No. of years	Men	Women	Total
Not reporting	198	410	608
Less than 1	1	7	18
1	19	101	120
2	68	246	314
3	76	487	563
	195	2426	2621
More than 4	13	85	101
	372	3359	3731
Median, both men and women, 4 year Percent having high school education,			
Percent having 4 years or more in hi	gh school, me wome	- 00	

89 percent of the women report some high school training. The 198 men and 410 women who failed to report, probably had not attended a secondary school. Table XI should be read as follows: Among the 3,731 Illinois teachers reporting attendance in high school, 1 man and 7 women have attended less than a year; 19 men and 101 women attended 1 year; 68 men and 246 women, 2 years. The median length of attendance for both men and women is 4 years. This means that about 36 percent of the men and 66 percent of the women graduated from a secondary school.

Two hundred and thirty-five men and 1,844 women, or a little less than half the teachers included in the survey, report normal school training. Table XII shows

TABLE XII.—DISTRIBUTION ON THE BASIS OF NORMAL SCHOOL TRAINING.

No. of Year	S	Men	Women	Total
Less than	1		354	387
	1	61	649	710
	2	74	640	714
	8	40	124	164
	4		58	77
	5		9	14
More than	5		. 8	8
		235	1844	2079
	n, 2.28 years; won ing normal training		nen 48.	

the distribution of these 2,079 teachers. About onesixth of them have been in normal school less than a year, but the distribution clusters around 1 and 2 years, the median falling in the 1-year group for women and in the 2-year group for men.

In answer to the question as to whether or not they have a normal school diploma, 112 men and 866 women make no reply. Eighty-nine men and 894 women reply in the affirmative, and 368 men and 2,010 women in the negative. In terms of percent, 16 percent of the men

and 23 percent of the women have normal school diplomas.

A college education is more frequent among the men than among the women teachers. Fifty-one percent of the men, but only 28 percent of the women report attendance in the higher institutions of learning. Table XIII shows that there is a range of from less than one

TABLE XIII.—DISTRIBUTION OF TEACHERS ON BASIS OF COLLEGE EDUCATION

No. of yea	rs	Men	Women	Total
Less than	1	. 13	94	107
	1	. 43	206	249
	2	. 49	195	244
	3	. 35	90	125
	4	. 102	245	347
	5	. 23	46	69
	6	. 9	14	23
	7	. 6		6
	8	5		5
		286	890	1176

No. not reporting:

women, 3079 men, 284

Median number of years in college:

Men 4

Women 2
Percent of teachers having College Education:

Men. 51 Women, 28

year to eight years of study. It is satisfying to find that the mode is in the four-year group, but the median, though maintained there by the men, for the women, falls in the two-year group. A college course has been completed by 10 percent of the women and 30 percent of the men teachers.

TABLE XIV.—DISTRIBUTION ACCORDING TO THE DEGREE THE TEACHERS HOLD.

Degree	Men	Women	Tota
Not answered	117	965	1082
Having none	277	2442	2719
B. A	72	182	254
M. A	8	9	17
B. S	37	56	93
B. C		1	
B. A.: B. S	2	1 .	1
B. A.: M. A	17	16	83
Ph. B.; B. E		2	
Ph. B	. 9	56	6
B. S.; E. E	2		
B. L	2	. 6	1
LL. B.; B. A	2		
B. S.: M. A	1	1	
M. D		1	
Ph. M		2	
Ph. B.; Pd. B.		1	
Ph. B.; M. A	4	1	
M. E	1		
Ph. B.; Ph.M.		2	
Ph. B.; M. A	3	4	
Ph. D	2	1	
B. S.; M. S	4	9	
B. A.; M. S	2	1 2	
M. S	. 2	1	
B. D		1	
f. A	1		
M. Acct	1		
	1	1	
B.L.; M. S		i	
Ph. B.; M. S.; B. A.; M. A	1		
Kg		2	
M. A.: Ps. M.		í	
M.A.; Ph. D	1	*	
B.A.; B.S.: M.A			
B.A.; M. D		1	
B.A.; LL.B	1	*	
L. L. B	î		
D. S		1	
B. D. S		î	
Ph. B.; Ed. B.		i	
B. P		î	
A.B.: A. L		2	
A.B.: M. L.		ĩ	
	569	3770	433
Percent of women holding degrees,	10		

Table XIV presents an interesting list of forty-three different college degrees or combinations of degrees held by these college graduates. The degrees of most common occurrence are the Bachelor's degree in Arts or Science, the Bachelor and the Master's degrees in Arts and Literature, and the degree of Bachelor of Philosophy. Sixty-four percent of those graduating from college received a B.A. or B.S.; 14 percent have an M.A. or M.S., and the same number have a Ph.B. The degree of Doctor of Philosophy is held by 3 men and 2 women.

Summarizing the training of the typical teacher in Illinois, we may expect four years in high school for both men and women. From this point, women, who expect to teach, do not, as a rule, prepare as well as men. A woman will probably have one year of normal school work and, one case in four, will have two years of college training. A man will probably have two years in normal school and four in college.

The question, "Does increased training pay dividends in the form of increased salary?" has been answered in the affirmative for the average American teacher. Is this true for Illinois teachers? An intensive study of the relation of training to salary answers this question in the affirmative for the average Illinois teacher. The tables which follow are based upon a random sampling of those replying to the questions relating to salary and to experience and training.

MOTIVES.

The motives for which men and women become teachers are readily grouped into eleven classes: attractiveness of the profession; influence of salary; liking for books, study, and school; influence of friends, relatives, or environment; unprepared for other work; opportunity offered itself; liking for children; easy hours; desire

TABLE XV.-THE RELATION OF THE SALARY TO THE TRAINING OF MEN TEACHERS.

High School Normal School & Normals Cholege or Head School Normal School & Normals University of the state of
High School 2 3 4 1 1 4 1 2 2 1 1 1 1 1 1 1 1 1
4 4440 444

TABLE XVI -- THE RELATION OF THE SALARY TO THE TRAINING OF WOMEN TEACHERS.

The second secon								The second second								
	High	School	10	Z	Normal	School	loc	H. S.	S. 4 yrs. Normals		Colle	College or University		Gra	Graduate	
Salary 1	C)	က	4	-	2	3	4	1	2	-	2	3	4	-	2	
Below \$250	-	1	2		1	2			2		-	-	-			
250-300	2	1	9	_	П		2			2	-		1			
300- 350			4		7			6.0	~	1						
400	1 1	8	31		2	2	4		5	2	-	63	2			
. 450	2	9	51	4	0.3	3	2	~	3 26	10	3	-	10	-		
450- 500	5	00	89	Ç	9	63	_	10		2	15	-	14	•		
	3	18	57	6		10	9	18		16	13	2	6	CI		
550- 600	2 5	10	79	53	10	00	00	25		10	14	10	12	-		
600- 650	1 1	12	44	12		11	12	3(9	12	co	19	-		
650- 700	2 2	13	33	œ		111	5	2		5	4	4	22	(0)		
700- 750	1	_	15	[-		4	3	H		7	1	5	56	22		
750- 800	-	4	28	2	භ	63	က	14		6	7	5	20	-		
800- 850		ಣ	22	11	හ	4	· ·	15		3	7	4	14	4		
820- 900		4	00	4	_		63	7		හ		H	6	3		
	-		16	co	2	9	4			1	3	2	17	-		
1000-1100			7	-	1	හ	23	64		23	9	T	හ		2	
1100-1200	_	63	9		හ	1		1-		22	1	2	00	භ		
1200-1300	9	-	36	ಇಾ	C3	9	2	25		3	2	00	00	-	-	
			7		_		-	7	8		4	4	6	-	-	
1500-1750			C3				-				2	-	00	2	-	
1750-2000									1			-	14	9	2	
2000-2250										1		p=1	-	1		
3000 or above												7	200	10 r		11.040
Totals 11	1 28	80	515	87	78	73	74	229	404	00	100	09	208	38	1	2082
Median salary								1								
650	0/9 0	585	573	646	633	RRA	691	84:1	800	C 2 E	040	400	000	COMP	002	

for occupation; desire for experience; and motive unknown.

Two thousand three hundred and eighty questionnaires were examined for data on this point. Thirtythree men and 371 women made no answer. The distribution of the remaining 225 men and 1,751 women is shown in Table XVII.

"Attractiveness of the profession" as an entering motive, ranks first with the men and second with the women for whom the salary motive is first. Such answers as "Interest," "Thought I would like it," "Ambition," and "Professional" were included in this group.

TABLE XVII.—DISTRIBUTION OF MEN AND WOMEN TEACHERS ACCORDING TO THE MOTIVE IMPELLING THEM TO ENTER THE PROFESSION.

Motive	Men	Women	Total
Attracted by profession	86	592	678
Influenced by salary	81	798	879
Liking for books and study Influence of relatives, friends,	23	49	72
or environment	13	. 84	97
Not prepared for anything else	9	22	31
Opportunity offered itself	4	17	21
Liking for children	4	119	123
Motive unknown	3	11	14
Easy hours,-no manual labor	2		2
Desire of occupation	- b	54	54
Desire for experience		5	5
No answer	33	371	404
Total	258	2122	2380

PERCENT OF MEN AND WOMEN ATTRACTED BY DIFFERENT MOTIVES.

Attracted by Profession	82.8	33.2
Influenced by salary	36.	45.57
Liking for books and study		2.79
Influence of relatives, etc	5.77	4.79
Not prepared for other work	4.	1.25
Opportunity offered	1.77	.97
Liking for children	1.77	6.79
Desire for occupation		3.08
Desire for experience		.28
Easy hours	88	
Motive unknown	1.83	.62
		1
	100.	100.

The financial motive was that which impelled 36 percent of the men and 45.5 percent of the women to become teachers. This motive is expressed by such replies as "To make a living," "Necessity," "Had to work," "Wanted to earn money," "Cash," "Salary."

"Liking for books and study" was much a stronger motive among men than among women. Twenty-three men, or 10 percent of those answering the question, and 49 women, or 3 percent, give this as their chief reason for becoming teachers.

"Influence of friends or relatives" is mentioned by

5 percent of the men and 4 percent of the women.

Four percent of the men and 9 percent of the women offered as an entering motive, "Not prepared for anything else," in such terms as "Only thing I could do," "Nothing else to do," "The only opportunity," and "The only thing I am fit for."

Replies like "Door opened," "Opportunity came," "Offered a position," "Drifted into it," are grouped under the opportunity motive, 1 percent of the men and

.62 percent of the women are listed in this class.

Women express more often than men the motive of "Liking for children." One explanation may lie in the fact that many of the women are primary and intermediate school teachers; yet with both men and women, this motive is subordinate in importance.

"Easy hours" appears only among the men of whom

but two name it as an entering motive.

"Desire for occupation" is a motive of minor importance found among the women who express it in such a phrase as "Attempting to forget a grief," "Wanted to

do something," "To avoid being idle."

Motives for which teachers remain in the teaching profession are identical with those which have been discussed as "entering motives." However, when we examine Table XVIII, we find that some eliminations have been made. Along the "remaining motives," we do not find "Opportunity presented itself," "Easy hours" or "Desire for experience." These tables show the importance of the several motives for staying in the profession. The "attractiveness of the occupation" has increased in value with experience for both men and women. It still holds its rank as first with the men and second with the women. As a remaining motive, the financial one has not changed in rank, but has increased in percent of importance with the women and decreased in this respect with the men. "Influence of friends" and "Desire for occupation," are not remaining motives with the men, neither is "Motive unknown" to the women.

TABLE XVIII.—MOTIVES FOR REMAINING IN THE TEACHING PROFESSION.

Motive	Men	Women	.Total
Liking for the profession. Influenced by salary. Not prepared for other work. Liking for study and books. Liking for children. Influence of friends. Desire for occupation. Motive unknown No answer	68 22 11 7	689 830 37 14 75 4 42	707 898 59 25 82 4 42 42 460
	258	2122	2380

PERCENT OF MEN AND WOMEN REMAINING FOR GIVEN MOTIVES

Motive	Men	V	Vomer
Liking for the profession	 . 51.52		10.07
Influenced by salary	 . 29.69	4	19.08
Not prepared for other work.	 . 9.6		2.18
Liking for study and books			.82
Liking for children	 . 3.5		4.43
Influence of friends			.23
			2.48
Desire for occupation Motive unknown	 . 1.31		
	100	10	10

CORRELATION OF AGE AND MOTIVE.

Among the men, the professional motive for entering leads every age-group excepting those of 15-16, 17-18. 19-20, and 21-22. In other words, it forms the leading motive of the men until the age of 23, which is past the median age for entering. Among women, the professional motive for entering takes second place in every age-group. As a motive for remaining among men, it leads every agegroup excepting 39-40, 45-46 and 59-60. Among women it leads to age 27, after which it has second place in every group. It is also noted that this motive among men increases from 38.23 percent as a beginning motive to 51.52 percent as a remaining motive, and among women in the same way from 33.23 percent to 40.07 percent This would seem to indicate a growing liking for the . profession on the part of some of those who have engaged in it.

The salary motive for entering leads among the men until age 23 (which is past the median beginning age), becoming secondary after that time. As a motive for remaining, it is second in every age-group except 39-40, 45-46, and 59-60. Among women it leads throughout as a beginning motive and as a motive for remaining after 27. Among men it decreases from 38 percent as an entering motive to 29.69 percent as a remaining one, while among women it increases from 45.57 percent to 49.08 percent. The fact that the professional, rather than the salary motive leads among men both for beginning and remaining is perhaps to be explained by the fact of the larger economic or occupational opportunity for men than for women. A woman who is under the necessity of supporting herself finds only few occupations so dignified and "respectable" as that of teaching, while to a man many other doors are open. It must be remembered, however, throughout this whole study, that not too much credence should be placed upon the showing made by the men, for the reason that we are dealing with only a relatively small number of cases, and that many of them probably located in good positions. The fact that the salary motive shows an increase in the case of women may not necessarily indicate an increase of the mercenary spirit. Many of the motives assigned for beginning are of a nature essentially temporary and must be replaced by other motives for remaining. This, added to the fact that a woman who remains single grows to look more and more upon self support as she stays in the teaching profession, will at least help to account for the increase in the salary motive among women.

The following tables show the relationships just summarized with the addition of the averages for each age without reference to sex of teachers.

TABLE XIX.—PROFESSIONAL MOTIVE FOR ENTERING.

PERCENT OF EACH	AGE-GROUP N		ONAL MOTIVE FOR
Age	Men	Women	Average
15 - 16 $17 - 18$	00.00% 29.26%	10.86% 34.05%	5.43 % 31.66 %
19 - 20	39.55%	35.99%	37.77%
$ \begin{array}{r} 21 - 22 \\ 23 - 24 \end{array} $	30.61% 48.64%	$35.65\% \\ 19.49\%$	33.13 % 33.57 %
25 - 26 $27 - 28$	43.74% 55.55%	33.33 % 33.33 %	38.59% 44.44%
29 - 30	75.00%	20.00%	47.50%
31 - 35 36 - 40	50.00% 25.00%	16.66% 00.00%	33.33 % 12.50 %
41 - 45	00.00%	00.00%	00.00%

TABLE XX .- SALARY MOTIVE FOR ENTERING.

PERCENT OF	Елон		P NAMING SERING	SALARY MOTIVE F	OR
Age		Men	Women	Average	
15 - 16		50.00%	45.65%	47.83%	
17 - 18		43.90%	45.98%	44.94%	
19 - 20		39.58%	45.93%	42.76%	

21	contra	22			36.73%	42.90%	39.81%
23		24		0	29.72%	49.15%	39.44%
25	-	26			26.00%	35.61%	30.81%
		28			33.33%	50.00%	41.69%
		30			25.00%	40.00%	37.50%
		35			50.00%	83.33%	66.66%
		40			25.00%	100.00%	62.50%
		45	1.		00.00%	100.00%	50.00%

TABLE XXI .-- PROFESSIONAL MOTIVE FOR REMAINING.

PRECENT OF EACH AGE—GROUP NAMING PROFESSIONAL MOTIVE FOR REMAINING.

	44214441	122101	
Age	Men	Women	Average
19 - 20	*	43.58%	21.79%
21 - 22	60.00%	56.75%	58.38%
23 - 24	42.85%	47.47%	45.16%
25 - 26	57.14%	45.31%	51.23%
27 - 28	52.17%	39.34%	45.76%
29 - 30	47.36%	43.31%	45.34%
31 - 32	47.61%	41.05%	44.33%
33 - 34	66.66%	31.76%	49.21%
85 - 86	66.66%	44.14%	55.40%
37 - 38	66.66%	30.43%	48.55%
39 - 40	37.50%	40.00%	38.75%
41 - 42	50.00%	86.36%	43.18%
43 - 44	57.14%	31.03%	44.09%
45 - 46	42.85%	25.80%	34.33%
47 - 48	50.00%	83.83%	41.67%
49 - 50	88.83%	84.14%	33.74%
51 - 52	50.00%	30.43%	40.22%
58 - 54	20.00%	25.92%	22.96%
55 - 56	42.85%	23.07%	32.96%
57 - 58	50.00%	00.00%	25.00%
59 - 60	33.33%	14.28%	23.80%
61 - 70	83.33%	00.00%	16.66%

^{*}Men are not represented in the 19-20 group.

TABLE XXII.—SALARY MOTIVE FOR REMAINING.

PERCENT OF EACH AGE—GROUP NAMING SALARY MOTIVE FOR ENTERING.

	TO IN THE	SIN O.	
Age	Men	Women	Average
19 - 20	*	35.89%	17.95%
21 - 22	00.00%	32.43%	16.22%
23 - 24	28.57%	40.40%	34.49%
25 - 26	15.23%	41.66%	28.45%
27 - 28	34.78%	48.09%	41.44%
29 - 30	26.31%	45.85%	35.58%
31 - 32	88.09%	47.36%	42.73%
33 - 34	00.00%	56.47%	23.24%
35 - 36	83.33%	45.94%	39.64%
37 - 38	20.00%	56.52%	38.26%

39 40	56.25%	57.14%	56.69	%
41 - 42	44.44%	59.09%	51.77	%
43 - 44	28.57%	60.34%	44.46	0/0
45 ~ 46	42.85%	67.73%	55.29	0%
47 - 48	00.00%	61.11%	35.56	
49 - 50	33.33%	63.41%	43.37	
51 - 52	50.00%	65.21%	57.60	
53 - 54	20.00%	74.07%	42.04	
55 - 56	28.57%	76.96%	52.77	
57 - 58	00.00%	100.00%	50.00	
59 - 60	66.66%	85.71%	76.18	
61 - 70	33.33%	100.00%	66.66	

^{*}Men are not represented in the 19-20 group.

BEGINNING AGE.

The age at which the teachers begin their career includes a wide range. From Table XXIII one finds that for men the range is from sixteen to forty-four years; for women, from fourteen to forty-four. From this table the percent distributions in age groups of one, two or more years may be determined.

TABLE XXIII.—DISTRIBUTION ACCORDING TO BEGINNING AGE.

Y	ears												Men	Won	en			Total
Not	answ	ered		 									10	 17	8			188
									ì			ì			1			1
	15.								Ī	П		Ī			ā			i i
									Ĭ	I.		ì	4	4	6			50
	17.								_				22	32	9			351
	18.								ŭ			Ĭ	101	94		23		1048
	19.								ů		ı	ì	84 .	76				844
	20.			 		•			٠			•	83	63				719
	21.							• •	Ů			ů	81	34				426
	22.			 			•	• •	•	• •		•	51	22				27
	23.			 	• •	• •	•	• •	•	٠.	• •		32	11				15
	24.			 • •	٠.	• •		• •	•	• •	• •	•	32		0			10
			*. * *	 		• •		• •	•	• •	•	•	16		8			5
	26.			 		-			×	м	• •	۰	16		2.			3
				 • •	٠.				•	* ,*		٠	14		0			3
	28.			 		• •	•		•		•	*	4		4			**
	29.			 				• •	۰	• •	•	٠	2		7			
	30.			 					•			*	3	•	3			į
	31.			 		• •			٠		• •	•	1 1		3			
				 • •	• •			• •	٠	• •	• •	٠			3			i
	32.			 				• •	۰	• •	• •	۰	3		2			
	33.			 					٠		٠.	٠	2		1			3
	34.	• • • •		 		•		٠.		• •		٠	1		1			
	35.			 					۰	• •			1		4			
	37.			 											1			
	39.			 								٠	2		-			
	40.			 											2			- 1

41		2	1	3
42			1	1
43		. 1		1
44		1	1	2
			**********	-
		569	3770	4339
	en, 20.84 years.			
Median, W	omen. 19.60 years.			

For both men and women, the mode is eighteen years. In fact, 24.9 percent of the women and 14.8 percent of the men begin teaching at the age of eighteen, 20.2 percent of the women and 14.8 percent of the men begin at nineteen, and 16.9 percent of the women and 17.8 percent of the men at twenty years of age, making a total of 62 percent of the women and 54.4 percent of the men whose professional career begins between the ages of eighteen and twenty years. The median, however, is nineteen years for women, for men, twenty years. The middle 50 percent of the cases of the men lie between 19.14 years and 22.86 years; the 50 percentile for women is from 18.54 to 20.84 years. This difference in percentile limits is to be expected when we remember that, as a rule, men stay in college longer than women.

In the beginning age, the Illinois teacher again bears close resemblance to the typical American teacher. The comparison is as follows:

	Illinois	Teacher	American	Teacher
Beginning age	Men	Women	Men	Women
Median	20.84	19.60	19.88	19.38
50 percentile	19.14-20.84	18.54-20.84	17.96-21.8	18.22-20.54

It is amusing to notice in passing, the comparatively large number of women who do not tell their beginning age. Frequently, in answer to this question, the tabulator met such responses as, "Of legal age," "Old enough to know my own mind," "4+." This reluctance to tell the age must be a sex characteristic for the men do not display such a trait.

¹Coffman: The Social Composition of the Teaching Population. p. 17.

GRADES OF SCHOOL.

That the field investigated by this study does not represent a highly selected class is borne out by the distribution found in Table XXIV. Reports have come

TABLE XXIV.—DISTRIBUTION OF TEACHERS ACCORDING TO GRADES OF SCHOOL IN WHICH THEY TEACH.

Grades			Men	Women		Tota
Unanswered		 	. 9	42		51
Rural		 	. 221	747	`.	968
Kindergarte	n	 		41		41
Primary		 	. 2	1011		1013
Intermediate				754		779
Grammar .		 	. 56	375		431
High Schoo				257		412
Special Tea				40		50
			478	3267		3645

PERCENTAGE DISTRIBUTION OF TEACHERS IN GRADES OF SCHOOLS.

Grades	en	Women	Total
Rural 47	.2	22.7	26.6
Kindergarten		1.2	1.1
Primary	.4	31.8	28.2
Intermediate		23.1	21.6
Grammar		11.5	11.
High School 33		7.8	10.5
Special Teacher 2		1.2	1.3
100	1 2	100.3	100.4

from rural districts; from towns of four hundred to a thousand inhabitants; and from cities varying in population from twenty-five hundred to twenty-five hundred thousand.

A few interesting points are disclosed in this table. There is a decided tendency for the men to teach either in rural schools or in the high schools. A very small percentage are found in the elementary grades and the 12 percent reporting from the grammar grades are, without doubt, principals of buildings. The women fill

in those departments left by men, and are found mostly in primary and intermediate grades. The rural schools claim many of the women also, but there is a great decrease in the number reporting from high school.

PROFESSIONAL EXPERIENCE.

Three hundred and eighty, or 66 percent of the men, and 1,994 or 52 percent of the women, have taught or are teaching in country schools. Table XXV shows that

TABLE XXV.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF COUNTRY SCHOOLS IN WHICH THEY HAVE TAUGHT.

No. of Schools	Men	Women	Tota
1	. 108	814	925
2	. 86	528	621
3	. 61	293	354
4	. 47	165	212
5	. 26	85	111
8	. 17	30	4'
7	. 8	26	34
8	. 5	14	19
9	. 4	8	1:
10	. 6	10	10
11	. 3	1	2
12	. 2	2	
13	. 2	14	i
14	. 5	14	S.
	380	1994	237
Median, men, 2 schools. Median, women, 2.34 schools.			

the number of different schools they have taught in ranges from 1 to 15. As many men and women teach in two schools or less, as teach in 3 schools or more.

Length of service in country schools ranges from onehalf a year to forty years. In general, however, teachers remain only one or two years before going to town schools. To be exact, there are as many men who stay less than 4 years as there are those who stay longer; and the number of women who leave before they have been in the country schools 3 years equals the number who stay for a longer period. In short, 70 percent of the teachers remain in the country schools 3 years or less.

TABLE XXVI.—DISTRIBUTION OF TEACHERS ACCORDING TO YEARS OF TEACHING IN COUNTRY SCHOOLS.

No.	of	Years	Men	Women	Tota
	1/2 .		1	75	76
	1.		69	560	629
	2.		63	463	526
	8.		60	310	370
	4.		44	. 162	206
	5.		30	104	134
	6.		21	86	107
	7.		20	59	79
			10	47	5'
	9.		14	26	4
	10.		8	28	30
	11.			14	14
	12.		4	12	10
	18.		6	5 7	1:
	14.		3	7	10
	15		4	1	:
	16.		6	, 6	1:
	17.		7	3	1
	18.			3	
	19.			2	
	20.			16	1
	25.		4		
					:
	30		1		
			8 1		
			1		
			380	1994	237
		ian, Men, 4 years.	580	LUUT .	201
7	hall	ian, Women, 3 years.			

Town schools have claimed 40 percent of the men and 34 percent of the women teachers. Tables XXVII and XXVIII show the distribution for number of schools and length of service in schools of this type. The median number of schools in town taught in is 1 for both men and women.

Length of service in town schools ranges from onehalf a year to more than thirty-five years, yet the terms of the greatest frequency are found below the four-year

TABLE XXVII.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF TOWN SCHOOLS IN WHICH THEY HAVE TAUGHT.

Tota	Women	20	Men						ools	eho	Sc	No. of
85	742		117					۲.				1.
39	344		54									2.
16	130		34									3.
6	49		11									4.
1	11		4									5.
	3		. 3						1 'n m			6
	4		1									7
												8.
			-1	-								9
	. 1.								1			10.
	1 '					1 7 1						12.
v 0			1									26
152	1303		225									
				1.	nen.	Wor	and	m :	Me		an	Medi

TABLE XXVIII.—DISTRIBUTION OF TEACHERS ACCORDING TO NUMBER OF YEARS IN TOWN SCHOOLS.

No. of	Years	€.	٠.,	Men	 Women	Total
1/2					12	12
1				. 52	273	325
2				40	234	274
3				32	176	208
4				28	128	156
E				16	83	99
6				. 13	72 4	- 88
7				. 7	54	61
8	3			. 4	 54	58
9				4	. 32	36
				. 8	. 39 -	4'
11				- 5	17	23
12				5	19	2.
18	3			. 1	15	10
14					12	13
1!				2	7	
16	3			2	12	- 1.
11	7				4	
18	3				10	10
19					7	-
20				4	5	9
21-2				2	22	2
					15	1
More		35			1	
	-					
				225	1303	152

group. Again the median years of service for men and women is the same, three years.

Two thousand and five hundred teachers or 58 percent of those reporting, have had experience in city schools. Of these 17 women failed to state the number of years they had spent in city schools, and 56 women who gave the number of years didn't tell in how many city schools they had taught.

In the town schools, there is the tendency to change little from one school system to another. Table XXIX shows that 50 percent of the men and women

TABLE XXIX.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF CITY SCHOOLS IN WHICH THEY HAVE TAUGHT.

No. of	Schools	Men	Women	Total
1.		111	1206	1317
2.		68	622	690
3		29	235	264
4.		- 16	100	116
5.		. 8	31	89
6.		_	7	7
7			4 .	2
8		2	0	is in
		ĩ	ä	70
		1	2 .	2
11			9	
14			1	
			1	
			56	56
MOT WIL	swering		30	DC
		236	2272	2508
35.44	an, Men and Women, 1.	200	2212	2500

have taught in but one city school. Turning to Table XXIV, one finds that teachers stay in city schools from one-half years to more than thirty years.

A comparison of the median years of experience of Illinois teachers with the typical American teacher upon the different levels is shown in the following table:

MEDIAN EXPERIENCE IN RURAL, TOWN, AND CITY SCHOOLS

The Illino	is Teacher	The .	American	Teacher
M	edian		Mediar	1
M.	W.		M.	W.
Rural3	2		2	2
Town	13		12	6
City	5		12	7

TABLE XXX.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF YEARS OF TEACHING IN CITY SCHOOLS.

No. of Years	Men	Women	Tota
1/2		23	2:
1	26	268	294
2	23	224	24
3	28	218	240
- 4	19	270	289
5	27	134	16:
6	8	122	130
7	7	121	128
8	12	94	100
9	10	94	104
10	11	85	91
11	4	49	53
12	3	57	60
13	6	38	4.
14	10	55	6:
15	3	51	5
16	5	44	(2.1
17\	5	39	4.
18	4	31	3:
19	4	40	4
20	4	. 52	51
21-25	10	117	. 12'
26-35	7	107	114
36		22	2:
Not answered		14	1'
Median, men, 5 years.	296	2272	2508
Median, women, 5 years.			

Although some teachers have taught in as many as twelve grades of schools, by far the greater number have changed grades less than four times. Table XXXI shows the median for men is five, and for women four.

TABLE XXXI.—DISTRIBUTION OF TEACHERS ON THE BASIS OF NUMBER OF GRADES TAUGHT.

No. of grades	Men	Women	Total
Not reporting	323	1425	1748
1	. 14	338	352
2	. 27	526	553
3	. 29	466	495
4		475	574
5	. 17	182	199
6	. 19	144	168
7	. 7	67	74
8		128	147
9		9	10
10		3	5
11	. 1	1	2
12	. 8	6	14
	-	-	
Total	. 569	3770	4339
Median number of Grades for Median number of Grades for		5. 4.	

Only 9 teachers in 4,339 receive their salary in twelve installments. By studying Table XXXII one

TABLE XXXII.—DISTRIBUTION ACCORDING TO THE NUMBER OF SALARIED MONTHS IN THE SCHOOL YEAR.

73 9 10 9	89 10 10 11 1 11 6
10 9 11 5 39	10 11 1 11 6
9 11 5 39	11 1 11 6
9 11 5 39	11 11 6
5 39	
5 39	
5 39	
	DE 43
	53
66	126
103	162
9	14
514	610
132	150
988	1099
254	271
	1641
4	4
4	9
3770	4339
	$ \begin{array}{r} 1577 \\ 4 \\ \hline 3770 \end{array} $

finds that salaried months in a year range from 1 to 12. Salaries are usually paid in towns and cities in nine or ten installments, but in the rural districts they are paid in six or seven installments.

The median salary for Illinois teachers was calculated from Superintendent Blair's Report for June, 1913. The salary distribution for 30,565 Illinois teachers is given in this report. Mr. Blair's figures show that there are as many men who receive less than \$529.34 as there are who receive more than that amount. The median for women is \$506.67.

IV

THE ECONOMIC SITUATION

When we consider the economic problems confronting the public school teachers of Illinois, we realize that the members of the teaching population are forced to make many financial economies. By economic problems the writer means questions of income, expenditure and saving. These necessarily relate to the amount spent for board and room; to the support of those dependent upon the teacher; to how the long summer vacation can be spent with the least expense; to the proportion of the salary set aside for books, institutes, travel; to how salary is supplemented to meet the financial demands made upon the teacher; to the investments and bonds; and, finally, to the amount saved.

THE PRESENT AGE.

Table XXXIII shows that the majority of the teach-

TABLE XXXIII.—DISTRIBUTION ON THE BASIS OF PRESENT AGE.

Age	Men	Women	Tota
Not answered	 . 3	325	328
17	 	4	4
18	 . 8	52	55
19	 . 16	124	140
		188	207
0.4	0.0	260	290
. 22	 . 27	237	264
		273	302
0.1	0.77	227	264
25		202	229
		196	220
		164	191
		152	17
		117	138
0.0	 4.0	129	145

81.																		18			R	7				974
	м	•	-	м	м	ч	-	-	н				н					18			6	â				87
32.																				•						
88.			9	٠	٠	а		۰				۰		٠	×			11			16		b.			73
34.																	9	20			7	3				93
85.																		11			7	9				90
36.																		15			7	8				90
87.																		12			5	3				65
38.																		17			5					76
39.																		12			5					68
																		14			6					74
40.																					4					57
41.																		13			-	-				
42.		. (٠				٠	×			۰	٠	٠	ø	ĸ		13			5					68
43.				٠										ì.		ŧ		10			4					54
44.	п			ı	,			п	ı			4	ı,	٠		ı		4			4	0				44
45.																		7			4	8				55
																		7			2	7				34
								i										ß			2	4				30
48.																		2			2					30
																		5			1	~				23
49.																		27			11	~				139
0-55.																										41
6-60.																		14			2					41
60.										 					ı	ı		7			2	2				12.5
																	_	_		-	-				-	
																	5'	70		3	80	5			4	375

ers in Illinois are giving the best part of their lives to service in the public schools. Fifty percent of the men are between 24 and 35 years of age, and 50 percent of the women are between 22 and 35 years of age. The median for men is 29, while that for the women is 26 vears and 9 months. There are about 10 percent more of women than of men who are between 21 and 24 years old. but the percentage of men who remain in the profession after they are 30 is a little higher than that of women. Forty-eight men and 161 women are more than 50 years old. For such faithful service, the teachers should receive compensation generous enough to permit adequate preparation for sickness or old age, either by insurance, pension, investment, or savings. Yet with the median salary at about \$500, freedom from anxiety against the time when resignation from active service is necessary because one's teaching ability has failed, it is impossible. It is to be expected that many able teachers will be lost from the profession if the prospect of preparing for the future remains so dubious.

BOARD AND ROOM PROBLEMS.

In answer to the question whether or not they teach in their home town, 22 percent of the unmarried men teachers and 47.4 percent of the unmarried women teachers reply in the affirmative; 77 percent of the men teachers and 52 percent of the women in the negative. (Table XXXIV.) This is a significant fact, for it shows

TABLE XXXIV.—DISTRIBUTION OF UNMARRIED TEACHERS;

01	V THE	BASIS	OF	WHETHER	OR	NOT	THEY	TEACH	IN	HOME	Town.	
					_							а

	Men	Women	Total
Not answered	24	236	260
Yes	54	1576	1629
No	188	1751	1940
Total	266	3563	3829

(B)

ON THE BASIS AS TO WHETHER OR NOT THEY LIVE WITH PARENTS.

	Men	Women	Total
Not answered	17	205	· 222
Yes	140	2069	2209
No	109	1289.	1398
Total	266	3563	3829

(O)

On the Basis as to whether or not they live with Relatives.

	Men		Women		Total
Not answered			1292	.1	1408
Yes			432		1976
No	187		1839		1970
Total	266	4 2 6	3563	-	3829

(D)

ACCORDING TO WHETHER OR NOT THEY "KEEP HOUSE."

-	Men >	Women	Total
Not answered Yes	. 11	894 567 2102	937 578 2278
Total	. 266	3563	3829

that towns hire largely within their own territorial boundaries. Teachers find it economical to stay at home, for board, if they pay any at all, is cheaper, and many other items of expense are reduced. This willingness to teach at home on a small salary doubtless has the effect of retarding the increase in salary for teachers in general; for as long as teachers of fair ability can be employed at the minimum cost, the campaign for more money for teachers will not meet with a hearty response.

Table XXXIV (B) shows that 61 percent of the women and 55 percent of the men live with their parents. To this statement should be added those who live with relatives and are therefore under the same economic advantage as those who live with parents. Table XXXIV (C) shows that 9 percent of the men and 20 percent of the women fall into this class. In other words, 75 percent of the teachers in Illinois live with parents. This does not insure the leadership of the teacher in the social activities of the community, however, for in answer to the question whether or not they spend their Saturdays and Sundays in the district where they teach, 146 men or 62 percent, and 2,060, or 60 percent of the women reply in the affirmative, but more than 30 percent of both men and women, though living in one district, teach in another.

Many teachers try to solve the board and room problem by keeping house. Table XXXIV (D) shows that 20 percent of the unmarried teachers do this as a means

of more economical and comfortable living.

Of those unmarried teachers who pay board, approximately 22 percent of the women and 24 percent of the men pay from \$4 to \$5 per week. The range is from \$1 to all the expense of the home; the mode lies in the \$4-5 group; the median for women is \$4.40 and the limits of the 50 percentile are \$3.50 and \$5.50; the median for the men is \$4.20 while the range of the 50 percentile is from \$3.25 to \$4.95.

Table XXXV shows the distribution of teachers on the basis of cost of board.

TABLE XXXV.—DISTRIBUTION OF UNMARRIED TEACHERS' ACCORDING TO THE AMOUNT OF BOARD THEY PAY.

Ame	ount per	week	Men	Women		Total
Not a	nswered		28	1210		1238
N	Vone		84	338	_	422
				51		53
,				299		320
				451		492
				533		589
				266		281
				179		188
				94		99
-				29		80
				51		54
1				6		6
				8		8
				2		2
	1			1		1
				10		11
				- 8		8
				1		1
Δ		e of home		31		31
23	III expens	or nome				
	Total		266	3563		3829

It is interesting to notice in Table XXXVI the variation of distance in miles between the school and the teacher's boarding place. The range is from ¼ mile to 42 miles. One wonders how much energy a teacher would have for her work after a daily journey of 42 miles before nine o'clock in the morning. As the Table shows, the median for both men and women is about ¼ mile.

Among the 569 men and 3,770 women included in the survey there are 303 married men and 207 married women. We are interested to know if they own their homes; if insecurity of tenure has been a factor in preventing such ownership; how much rent they pay; and how many children they have. Tables XXXVI to XL show the distributions for these items.

TABLE XXXVI.—DISTRIBUTION OF UNMARRIED TEACHERS ON THE BASIS OF DISTANCE IN MILES BETWEEN THE ROOM AND SCHOOL.

No. of Miles	Men	Women	To	otal
Not answered	43	. 543		586
Less than 1/4	32	348	5	380
1/4-1/2	61	877	1 1	938
1/4-1	37	813	1 1	850
1- 2	36	505	1	541
2- 8	18	207		225
3- 4	19	95		114
4- 5	7	64		71
5- 6		26		29
6- 7	. 8	17		20
7- 8		17		20
8- 9	-	6		6
9–10		14		14
10-11	. 2	ī		3
11-12		6		6
12–13		1		ĭ
13-14		6		6
14-15	•	2		2
15-16	1			ĩ
16-17		: 3		3
17–18		. 3	,	3
18-19				U
19–20		. 2		2
	•			-
25-30		. 5		5
				9
40-42	1	2		0
· Total	266	3563	3	829

TABLE XXXVII.—DISTRIBUTION OF MARRIED TEACHERS ACCORDING TO WHETHER OR NOT THEY OWN THEIR HOMES.

	Men	Women	Total
Not answered	110 179	75 117 12	185 296 24
	808	207	510

TABLE XXXVIII.—DISTRIBUTION OF MARRIED TEACHERS ON THE BASIS OF WHETHER INSECURITY OF TENURE HAS PREVENTED OWNING A HOME.

		Men	Women	Total
Not	answered	88	101	189
Yes			24	129
No		110	82	192
			transferred.	
		303	207	510

TABLE XXXIX.—DISTRIBUTION OF MARRIED TEACHERS ACCORDING TO THE AMOUNT OF RENT THEY PAY.

		Men	Women	Total
	wered	81	86	166
Non		61	41	102
\$4		5		4
5		5	1	(
6		4	1 , ,	
7		4	, 1	
8		2	5	
9		6	9	- (
10		8	8	16
11		2	1	
12		5	3	121
18		2	· · · · · · · · · · · · · · · · · · ·	1
14		1	. 3	
15		3	5 -	- 1
16		8	5	13
17		2	3	į
18-19		6	2	
20-21		18	9	2
22-24		6	2	
25-27		22	7	29
28-30		18	3	2:
31-33		5	3	;
34-36		9		1
37-39		2	7	
40-42		9	. 4	13
43-45		3		
50		4	2	
70		1		
80	/	1	1	
		303	207	51
35.4	ian, men, \$16.37; wome	n. \$11.		

TABLE XL.—DISTRIBUTION OF MARRIED TEACHERS ACCORDING TO THE NUMBER OF CHILDREN THEY HAVE.

N	umber											Men			7	Women		Tota
Not	answere None 1 2 3		•				• •			 		9 81 84 56 33 14				7 83 58 32 19		164 164 142 88 52
	5 6 7 8	• •				• •			 		 	16 6 2	1			2 2		18
	Medjan,			en	•	2	2					303		,		207		510

In answer to the question of ownership of the home, 36 percent of the men and women reply in the affirmative, and 5 percent say they partly own it. Insecurity of tenure has prevented 40 percent of the teachers from buying a house.

One hundred and sixty-six of the married teachers do not tell how much rent they pay. For those reporting, the range is from \$4 to \$80 per month. One hundred and two pay no rent at all, but the 185 who own a house are included in the 286 who either have not answered the question or say they do not pay any rent. The median for men is \$16.37; for women \$11. Women, on account of small salaries, are forced to live in poor districts or small apartments.

The family of the married may consist of from 2 to 10 members. The range in number of children is from 0 to 8 for men, and from 0 to 6 for women. The median, however, is 2 for men and 1 for women. This brings the

median for the family to 3 or 4 members.

Amos Warner, in his American Charities, gives the results of investigations into the subjects of a fair living wage. The Massachusetts Bureau of Labor set the living wage for a family of 5 at \$724. Although the salaries of married teachers have not been tabulated separately, the probability is that many men and women with families receive less than \$724. The median for both men and women is \$200 below this amount. Even if the salary does allow them to remain financially independent, the family must forego all comforts and pleasures until a salary of \$900 is received.

EXPENDITURES.

If the teacher had only herself to support, she might live very comfortably upon a salary of \$500; but about half of the Illinois teachers have one or more dependent

¹Warner, Amos; American Charities, p. 184.

upon them for all or part of their living. Tables XLI to XLIV are arranged to show the number of dependents of more or less than 21 years of age. The distribution has also been made upon the basis of their total or partial dependency upon the teacher.

Table XLI should be read as follows: 208 men and 1,492 women have no male dependents under 21 years of age; 77 men and 199 women have one female dependent under 21 years of age; 2 men and 1 woman have 6 female dependents under 21 years of age. In fact, 340

TABLE XLI.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF DEPENDENTS UNDER 21 YEARS OF AGE.

		Dependents	under 21	years.					
Number	Ma	le Dependent	s	Female	Female Dependents				
Number	Men	Women	Total	Men	Women	Tota			
0	208	1492	1700	191	1418	1609			
1	93	151	244	77	199	276			
2	32	30	62	52	43	95			
3	14	7	21	18	12	30			
44	2	8	5	- 6	5	11			
5	2		2	1	1	i i			
6			1	2	1	5			
Not an-									
swered	218	2087	2305	222	2091	2313			
					-				
	569	3770	4339	567	3770	4339			

TABLE XLII.—DISTRIBUTION OF TEACHERS ACCORDING TO NUMBER OF DEPENDENTS OVER 21 YEARS OF AGE.

	1	Dependent ov	er 21 ye	ars of age			
Number	Ma	le Dependent	ts	Female Dependents			
Number	Men	Women	Total	Men	Women	Total	
Not answered 0 1 2 8 4 5	256 274 36 8	2137 1423 195 12 2 1 3770	2393 1697 231 15 2 1 4339	247 112 174 30 6	2122 1015 537 84 9 2 1	2369 1127 711 114 15 2 1	

TABLE XLIII.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF PERSONS TOTALLY DEPENDENT UPON THEM.

		Totally I	ependent.			
Number	Unde	er 21 years o	f age	Over 21	years of age	
Number	Men	Women	Total	Men	Women	Total
Not an-				-		
swered	232	2113	2345	272	2135	2407
10	166	1514	1680	158	1451	1609
1	51	78	129	117	141	258
2	57	48	105	17	36	53
3	33	11	44	3	5	18
14	13	4	17	1	1	2
5	11		11	X	1	2
6	3	2	5			
7	2		2			
8	1		1			
	569	3770	4339	569	3770	4339

TABLE XLIV.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF PERSONS PARTIALLY DEPENDENT UPON THEM.

		Partial	ly Depende	ent.		
Number	Unde	er 21 years	of age	Over 2	l years of ag	е
Number	Men	Women	Total	Men	Women	Tota
Not an-			-			
swered	245	2030	2275	260	2011	2271
0	291	1459	1750	231	1122	1333
1	18	161	179	47	391	438
2	7	69	76	21	196	217
B	4	24	28.	8	43	51
4	B	14	171	2	4	6
5	-	10	6		3	5
6	1	B	71			
7		1	1			
	569	3770	4339	569	3770	4339

teachers have male dependents under 21, and 417 have female dependents. The median number of dependents under 21 is one. Of dependents over 21 years of age, 200 teachers have male dependents and 843 have female dependents.

From Table XLIII one finds that 51 men and 78 women have 1 under 21 years old totally dependent upon them; 117 men and 141 women have 1 over 21 years of

age totally dependent; 387 teachers have one person totally dependent, 158 have two, and 94 have three or more. In all, 14 percent of our teachers have one per-

son or more totally dependent upon them.

From Table XLIV one reads that 18 men and 161 women have one person under 21 years of age partially dependent; 47 men and 391 women have one over 21 years of age partially dependent. One thousand thirty-eight or 24 percent of the teachers have one or more partially dependent upon them.

USE OF SUMMER VACATION.

What to do during the summer vacation is a real problem with most teachers. Many have no homes where they may stay, and many cannot afford to remain idle. Tables XLV and XLVI show how the men and women have spent the last three summers. The principal ways of spending the vacation are: School, travel, visiting, home, home study, teaching, nursing, working, in the country, sick, and resting. The table emphasizes the fact that men and women do not show much similarity in respect to what they do in the summer. More women than men attend summer school, more travel, more visit, and more

TABLE XLV.—DISTRIBUTION OF MEN TEACHERS ACCORDING TO HOW THEY HAVE SPENT THE LAST THREE SUMMERS.

1	First	Second	Third	Total
Not answered	120	137	156	413
Attending School	104	79	75	258
Travel	45	35	39	119
Visiting		2	1	3
Home	20	26	23	69
Home Study	22	24	25	-71
Teaching	24	24	29	77
Nursing	1	1	3	5
Ill	3	5	2	10
Resting	23	21	25	69
	195	207	180	582
In Country	12	8	11	31
_				
	569	569 _	569	. 1707

TABLE XLVI.-HOW THE WOMEN TEACHERS HAVE SPENT THE LAST THREE SUMMERS.

	First	Second	Third	Total
Not answered	. 774	931	1141	2846
Attending School	. 728	609	690	1827
Travel		732	670	2036
Visiting		115	88	314
Home		812	811	2485
Home Study	. 78	92	97	267
Teaching		89	79	254
Vursing		44	54	141
	0.0	26	32	94
Resting	. 155	157	150	462
Working		87	87	270
In Country		76	71	224
	3770	3770	3770	11310

stay at home. Few work, study at home, or teach. Forty-four percent of the men work all summer; 19 percent attend school, half as many travel and a little less than 6 percent stay at home. These tables impress upon one again the inadequacy of teachers' salaries. If the salaries were sufficient for their needs, so many would not be obliged to work during the vacation, and so many women would not remain at home. More travel, more study, and more ways of self improvement would be found. Some teachers reported that it took until December to pay the debts incurred during the long summer vacation. This is another indication that salaries paid in twelve installments might be more satisfactory.

AMOUNT SPENT ON PROFESSIONAL READING.

For reading circle books, magazines, teachers' meetings, institutes, and similar means of cultivation, teachers spend from nothing to \$200 (Table XLVII). The median for men is \$15; for women \$10. Nearly 30 percent either do not answer or say they cannot afford the expense of these benefits. It is highly probable that no answer means no expenditure for these items.

TABLE XLVII.—DISTRIBUTION OF TEACHERS ACCORDING TO THE AMOUNT SPENT ANNUALLY FOR READING CIRCLE BOOKS, MAGAZINES, TEACHERS MEETINGS.

Amo	ount	Men	Women	Tota
Not a	nswered	120	1025	114
	None	8 ′	54	6:
	\$1	2	24	20
,	2	3	67	71
	3	5	118	12
	4	5	78	8
	5	49	510	55
	6	9	101	11
	7	5	75	8
	8	5	100	10
	9	1	13	1
	10	85	606	69
	11-15	58	361	41
	16-20	48	269	31
	21-25	67	216	28
	26-30	24	65	8
	31-35	7	12	1
	40-45	13	21	3
	50-60	36	45	8
	70-80	8	4	1
	100-125	10	5	1
	150-200	1	1	
		569	3770	433

About half of the men and an eighth of the women reinforce the income from sources other than salary. Table XLVIII shows the sources from which the men gain an additional income ranging from less than \$50 to \$2,600. Farming and labor are the chief sources. The median income is \$231.77.

The means by which women earn money differ from those of the men. Investments and teaching are found in Table XLIX to be the most resourceful for the women. The amount of income ranges from less than \$50 to \$6,600 or more but the median is \$107.66. Were it not from necessity brought about by inadequate salary, 30 percent of the men would not work on farms, and 25 percent of them would not be employed as day laborers; 17 percent of the women would not tutor nor teach addi-

TABLE XLVIII.—DISTRIBUTION OF MEN TEACHERS ACCORDING
TO THE SOURCE AND AMOUNT OF ANNUAL INCOME,
OTHER THAN SALARY.

Amount of Income	Teaching	Investments		Farming	Labor	Canvassing Soliciting	Artisans	Minister	Total
1-50 51-100	8	6 7	5	10	5 88	2			14
101-150	18	8	2	8	9	-	- 1		26
157-200	5	5	5	14	5	1	1 2		37
201-250	4	5	_	4					13
251-300	1	1	3	11	- 4				20
301-350	2	2 3 1		3	5	1	1		14
351-400		3		- 8	2				Š
401-450	1 1 2 1	1	_	1					3
451-500	1	8	16	9	1	2			21
600	2	2	1	4			1	1	1:
700 800	1	1	1	1 2 2					-
900	1		1	5		1	1		
1000	x	1	1	1		1	1		
1200		1 2							
1500		ũ		3					
1800		î		2					:
2200		ī							
2600		1							
Total	31	45	24	79	64	7	6	. 1	25'
Number Not rep	having,	g no i	ncome a	part fi	om sal	ary, 140 173			
						313			

tional hours, 5 percent would not be employed as clerks, and 3 percent would not go into domestic service.

INSURANCE AND SAVINGS.

Table L shows that 169 men or 30 percent of those replying to the questionnaire carry no life insurance. This figure should be increased to 45 percent for no doubt those 89 men not reporting are not insured. The distribution for the men clusters around \$1,000, \$2,000.

group.

TABLE XLIX.—DISTRIBUTION OF WOMEN TEACHERS ACCORDING TO THE SOURCE AND AMOUNT OF ANNUAL INCOME, OTHER THAN SALARY.

Incoma	Teaching	Investments	Clerical Clerking	Parents	Domestic Service	Board and Rooms	Sewing Gardening	Husband	Pension	Total
1-50 101-150 101-150 151-200 201-250 201-250 301-350 301-350 401-450 401-450 600 700 800 900 1000 1200 1300 1500 1600 2000 2100 3000 5000 6600	20 39 10 11 1 4 4 3 1 1	51 85 46 37 18 18 10 10 6 12 10 4 6 2 3 2 1 1 1 1	8 9 9 3 2 2 1 1 1 3 3	14 2 3 1 3 1	2 5 4 3 1	1 1	6 8 2 1 1 1	1 1 1 1	1	87 163 56 22 25 13 14 7 18 6 6 2 7 3 2 11 11 11 11 11
Medi:	89	327	28 \$107.66.	25	15	6	18	8	1 .	517

and \$3,000 investments. The median falls into the \$2,000

Percent of women having income other than salary, 13.7.

About 90 percent of the women have no insurance. Many cases in the distribution for women are listed below the \$1,000 group. In fact, the median for women is \$1,000.

The failure to invest in life insurance policies is another significant factor pointing to financial hardships. A large portion of those engaged in the teaching profession are unprotected from sickness or accident.

TABLE L.—DISTRIBUTION OF TEACHERS ON THE BASIS OF THEIR LIFE INSURANCE.

Insurance	Men	Women	Total
Not answered .	89	907	986
Having None	169	1911	2080
100		17	17
150		11	11
200		18 19	18
250	1 1		20
300	1	11	12
350		3	8
400		6	6
450		3	8
500	6	98	104
600		4	4
700		14	14
1000 1100	107	535	642
1100		. 5	5
1200	1 1	б	7
1400	1	2	3
1500	4	27	31
1600	4 1 75	8	4
2000	75	111	186
2100		2	2
2200		1 2	1
2300		2	1 2 12
2500	6	6	12
3000	43	26	69
4000	19	4	23
5000	19	11	30
. 6000	11	4	15
7000	7	1 2	8
8000	6	2	8
9000	1 2		1
10000	2		8 8 1 2
12000	В		8
	562	3770	4332

Nor is the situation relieved by income from investments or savings bank accounts. Table LI shows the distributions on the basis of amount saved during each of the last five years.

Forty-five men and 327 women list investments as a source of additional income, but the amounts of these investments are mostly less than \$250 for the men and below \$600 for the women.

During the last five years, only 3 men and only 3 women have been able to save \$2,000. They are quite

TABLE LI.—DISTRIBUTION OF TEACHERS ON THE BASIS OF THE AMOUNT SAVED FROM THE ANNUAL SALARY DURING EACH OF THE LAST FIVE YEARS.

Amount	Men	Women	Total
Not answered	169	1488	1657
None	121	715	836
less than \$25	13	52	85
25-50	15	183	198
50-75	6	150	156
75-100	47	412	459
100-125	4	85	80
125-150	19	134	153
150-175	4	40	44
175-200	41	188	229
200-250	17	78	9.5
250-300	37	78	115
300-350	3	13	16
350-400	20	38	. 58
400-450	1	4	- 8
450-500	22	55	77
500-600	7	19	26
600-700	2	8	10
700-800	2 2	8	10
900-1000	11	12	20
1100		4	,
1200	2 .	$\bar{2}$	9
1300			
1400	1	1	
1500	$\frac{1}{2}$		1
2000	3	3	1
	569	3770	433
Median, men \$194.	4		

the exception, however, for 121 men and 715 women have been unable to save anything. It is very probable that the 1,657 who did not answer this question belong to this class also. If this is true 57 percent of the teachers are wholly dependent upon the salaries they receive. The median amount saved during each of the last five years is \$194 for men and \$99.15 for women. This means that in five years as many women have saved \$496.75 or more as have saved \$495.75 or less; and as many men have saved \$970 or more as have saved \$969 or less. The writer has not the data to show how much men and women in other professions save in five years, but judging from the way teachers leave their profes-

sion to join another, it is probable that in other fields the opportunities for preparing for the future as well as for providing for the present, are better than they are in the teaching profession.

An intensive study based on 2,800 replies in regard to insurance, savings, and income from permanent in-

vestments is summarized in the following table:

TABLE LII.—% HAVING INSURANCE, SAVINGS OR AN INCOME FROM INVESTMENTS

Percent not having insurance, savings or in-				
come	Men	44.9	Women	37.87
Percent having insurance saving or income	Men	55.1	Women	62.13
Percent having insurance		47.9	27	30.68
Percent having savings		29.69	7.9	40.52
Percent having income	9.9	7.37	27	11.05
(In the last item only income from permanent	invest	ments	was consi	dered)
Average insurance Men \$278'			Women 1	
Average savings " 327	.77			182.03
Average income " 395	.97		**	241.98

As age increases the amount of insurance carried and the amount of savings increase for both men and women, but the amount of income from investments increases up to 50 years of age only and then declines for men. The following table makes clear the relationships of age to insurance, income, and savings.

TABLE LIII .- SHOWING AVERAGES AT DIFFERENT AGE LEVELS.

	O	20	30	40	50	60
	to	to	to	to	to	and
	20	30	40	50	60	OAGE
Av. Insuranc	е					
Men	\$1250	2116.76	3187.30	2892.70	3700	5100
Women	\$1250	930.25	1192.80	1509.63	1545	1500
Av. Savings						
Men	8 0	191.28	517.50	337.09	264.	200
Women	\$ 59	145.21	180.63	225.28	248.50	400
Av. Income						
Men	8 0	325.	403.72	434.21	272.	150
Women	\$276	251.52	184.60	227.82	315.52	980

TEACHERS' RECREATIONS.

The recreational activities of teachers have a vital bearing on the efficiency of their teaching. It is, therefore, important that the activities of teachers during the vacation periods be truly recreational and result in personal improvement both physical and mental. Tables XLV and XLVI when combined show that Illinois teachers spend their summers in the following ways:

TABLE LIV .- HOW LAST THREE SUMMERS WERE SPENT.

	Men	Women	Total
Not answered	413	2846	3259
Attending School	258	1827	2085
Travel	119	2036	2155
Visiting		314	317
Home	69	2485	2554
Home Study	71	267	338
Teaching	77	254	331
Nursing	5	141	146
III	10	94	104
Resting	69	462	531
Working		270	832
In Country	31	224	25
	1707	11310	13017

The above table indicates "Travel," "Staying at Home," "Attending School" and "Working" as having the greatest frequency as ways of spending summer vacations. All of these may not be truly recreative in character. Some call for expenditure of teachers' sayings and others tend to add to the teachers' income.

It is interesting to note the significance of travel as a means of recreation and self-improvement. Fifty-eight percent of all elementary teachers and sixty-two percent of all high school teachers spent some time and money in this form of recreation during the past three summers. The following tables show where they went and indicate relatively the distances traveled.

TABLE LV.—WHERE TEACHERS TRAVELED DURING THE PAST THREE YEARS.

			Women					Men		
Whole cases considered.	2012					216				
No. not traveling	827	or	41.1%	of	all	111	or	51.3%	of	all
No. traveling			58.9%					48.7%		
No. going abroad			14.2%					17.1%		
		or	8.3%	of	all			8.3%		
No. going to Atlantic	554	or	46.7%	of	Trav.	44		39.6%		
		or	27.5%	of	all			19.3%		
No. going to Pacific	346	or	29.1%	of	Trav.			24.3%		
		or	17.1%	of	all		or	11.8%	of	all
No. going to Rockies	415		35.0%.			36		32.4%		
			20.6%					15.7%		
No. going to South	70	or	5.9%	of	Trav.	22		19.9%		
0.0			3.4%					9.7%		
No. going on Short Trips	627		61.3%			67		60.3%		
			36.2%					28.2%		

TABLE LVI.—WHERE TEACHERS TRAVEL—MEN AND WOMEN COMBINED.

		1	Men	an	d Women	1		-
Whole cases considered	2228							
No. not Traveling	938	or	41.6%	of	all			
No. Traveling								
No. going Abroad	188	or	8.4%	of	Trav. or	4.6%	of	all
No. going to Atlantic					Trav. or			
No. going to Pacific					Trav. or			
No. going to Rockies					Trav. or			
No. going to South					Trav. or			
No. going on Short Trips					Trav. or			

TABLE LVII .- WHERE HIGH SCHOOL TEACHERS TRAVEL.

Whole cases considered	472		Men	an	nd Women
No. not Traveling	180		38.1%		
No. Traveling			61.9%		all Trav. or 11.1% of a
No. going to Atlantic	133	or	45.5%	of	Trav. or 28.2% of al
No. going to Pacific					Trav. or 18.4% of all Trav. or 19.0% of all
No. going to South	44	or	15.0%	of	Trav. or 9.2% of al
No. going on Short Trips	147	or	50.3%	of	Trav. or 31.1% of a

These tables indicate slight differences between the men and women teachers in the distances traveled and the regions visited. They also reveal the fact that high school teachers travel in greater proportion than do teachers in general. This fact is to be expected as high school teachers receive much larger salaries than graded teachers.

The proportion of teachers answering that they attended school or engaged in home study is large, 2,433 or twenty-five percent of those answering. This is evidence of conscious effort on the part of the Illinois teaching profession to increase their efficiency. The reports as to the kind and amount of reading indicate a similar tendency, although the reading done does not tend directly towards professional improvement. Part of it was recreational in character. A classification of the reading done during the two years preceding this investigation is given in the following tables:

TABLE LVIII.—CLASSIFICATION OF READING MATTER.

Men		Wome	n
Number	Per- cent	Number	Per-
Number of Teachers who read Fiction 43	23.0	409	22.5
" " Books on Edu-	9.6	184	10.4
cation	34.7	696	38.3
Arts 1	0.5	10	0.5
Number of Teachers who read Books on Sociology 2	1.0	55	3.0
Number of Teachers who read Books on Commercial Law Subjects	3.2	ō	o
Number of Teachers who read Books on	ō	14	0.8
Physical Education			
Religion	0	20	1.0
History 9 Number of Teachers who read Books on	4.8	70	3.8
Philosophy 11	5.8	104	5.2
Number of Teachers who read Books on Useful Arts	5.3	22	1.2
Totals		1584	

TABLE LIX.—GROUP CLASSIFICATION OF READING MATTER.

						Men	a	Wome	en
						Number	Per-	Number	Per
Number	of	Teachers	who	read	Text Books only.	. 8	4.2	19	1.0
12	2.5	7.7	2.3	2.2	Professional Bool		43.8	720	39.
7.9	2.2	17	2.2	2.2	Books for Cultur	re 22	11.3	251	13.
,,	2.5	31	17	2.2	Fiction	. 43	23.0	409	22.
17	2.2	1.7	2.9	3.7	" only		9.6	184	10.
**	11	17	2.2	2.2	Magazines only		0.5	12	0.0
., ber	or	Kind of	Boo		not specify the Nur Read on account	n-			
							20.3	167	9.
	Tot	als				.212		1762	

TABLE LX.—CLASSIFICATION ACCORDING TO NUMBER OF BOOKS READ.

Men-Total 187			Women-Total 1		
	M	[en	Women		
Number of Books	Number	Percent	Number	Percen	
0	60	32.0	620	34.2	
1	18	9.6	176	9.7	
2	16	8.5	321	12.2	
3	24	12.8	209	11.5	
A	7	3.7	80	4.3	
5	3	2.1	61	3.3	
Ri	14	2.1	19	1.0	
7	1	0.5	15	0.8	
8	0	0.0	В	0.4	
D	2	1.0	2	0.1	
10	1	0.5	4	0.2	
11	1	0.5	4	0.2	
12	1	0.5	2	0.1	
13	1	0.5	O	0.0	
14	0	0.0	1	0.05	
15	1	0.5	3	0.15	
16	0	0.0	0	0.0	
17	Ö	0.0	2	0.1	
18	1	0.5	ō	0.0	
19	O	0.0	0	0.0	
20	1	0.5	2	0.1	
21	0	0.0	O	0.0	
22	0	0.0	2	0.1	
25	0	0.0	2	0.1	
35	Ö	0.0	1	0.05	
45	1	0.5	O	0.0	
50	1	0.5	1	0.05	
60	1	0.5	Ō	0.0	
75	0	0.0	i	0.05	

TABLE LXI.—CLASSIFICATION OF FOREIGN LITERATURE READ.

Men—Total 187		Women-	-Total 1	313.
	M	en	Wo	men
	Number	Percent	Number	Percent
German Literature	5	2.6	11	0.6
French Literature	4	2.1	28	1.5
Norwegian and Swedish Literature.	1	0.5	6	0.3
Italian Literature	1	0.5	0	0.0
Russian Literature	0	0.0	1	0.05
Polish Literature	0	0.0	1	0.05

THE TEACHER'S DAY.

To some laymen, teachers seem to enjoy a life of leisure. Such persons observe only the short day of six or six and one-half hours that the schools are in session. They forget that the zealous teacher arrives at the building an hour before school opens and frequently remains until darkness drives her away in the evening. The average American teacher spends as many hours daily in the school building as the average workman, clerk, or business man spends at his task. In addition to this, teachers are compelled to devote a part of their time outside of school hours to the preparation of lessons, to

TABLE LXII.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF HOURS SPENT EACH DAY OUTSIDE OF REGULAR SCHOOL HOURS IN THE PREPARATION OF LESSONS.

	Men	Women	Total
None	10	40	50
Less than ½ hr.	2	16	18
1/2-1	117	1221	1338
1 -1 1/2	29	354	383
1/2-2	158	734	892
2 -2 1/2	9	61	70
21/2-3	56	196	252
3 -4	22	70	92
L -5	7	25	32
5 -6		11	11
3 -7	1	5	6
	$\tilde{2}$	1	3
	413	2734	3147
Median	1 1/2 -2	1-1 1/2	1-11/2

grading manuscripts, collecting materials, etc., and in visiting parents and pupils. The next two Tables give some idea of the amount of time spent in the discharge of these duties.

It will be observed that only 50 teachers out of 3,147 spend no time at all in the preparation of lessons. A few spend the unusual amount of seven or eight hours each day in getting ready for the next day's work. The Table clearly shows that 86 percent of the teachers spend from one to two hours in the daily preparation of lessons.

TABLE LXIII.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF HOURS SPENT EACH DAY OUTSIDE OF REGULAR SCHOOL HOURS IN THE GRADING OF MANUSCRIPTS.

	Men	Women	Total
None	15	149	164
¼ hour	10	97	107
1/2 ''	79	518	597
84	4.3	65	108
1 "	112	702	814
I -1½	10	80	90
1 1/2 -2 ''	27	153	180
3 -2 1/2 "		7	7
21/2-3 "	1	28	29
1 -4 "	-	9	E
4 -5 "	9	9	28
6		2	2
	299	1812	2111

This Table shows that teachers generally spend approximately one hour each day outside of regular school hours in the grading of manuscripts.

TABLE LXIV.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF HOURS SPENT EACH DAY OUTSIDE OF REGULAR SCHOOL HOURS IN COLLECTING OF MATERIALS

	Men	Women	Total
None	53	163	216
¼ hour or less	12	207	219
1/4 - 1/2 hour	58	437	495
% ''	2	15	17

1	"	50	279	329
1 1/2	,,	1	12	13
2	1,	17	48	65
2 1/2	"		2	2
3	"	3	5	8
4	,,		2	2
6	"		1	1
		100	1151	1005
		196	1171	1367

Out of 4,339 teachers, only 1,151 spent any time in the collection of materials. There is less need than formerly for teachers to collect materials as schools are better equipped than they were a few years ago. Naturally there is little need for grade teachers to collect material, as their subjects are not highly specialized. Nevertheless, the fact that one-fourth of the teaching force find it necessary to spend a part of their time collecting materials for illustrative and demonstration purposes cannot be passed over lightly. It indicates a proper professional attitude for teachers to use their time in this way; it means that they are zealously trying to improve the character of their instruction.

TABLE LXV.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF HOURS THEY SPEND EACH DAY OUTSIDE OF REGULAR SCHOOL HOURS VISITING PARENTS.

	Men	Women	Total
None	 124	574	698
¼ hr. or less	8	42	50
1/4 - 1/2 hr.	8	52	60
1 ",	10	44	' 54
2 "	3	9	1:
3 "	4	1	
4 ''	1		1
	 	=	001
	158	723	88.

Only a small percentage of teachers spend any time visiting parents. Those cherished and now idealized intimacies which existed between teachers and parents when teachers "boarded around" have been lost in the cities in an intricate mesh of wider contacts. The same

forces are at work in rural districts, destroying that economic and spiritual community which once existed. The heavier responsibilities resting upon teachers give them less time for visitation, and the increasing complexity of social relations outside the school have minimized the interest of parents in the work of the school.

TABLE LXVI.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF HOURS SPENT EACH DAY OUTSIDE OF REGULAR SCHOOL HOURS IN VISITING SICK PUPILS.

	Men	Women	Total
None	126	580	706
¼ hour or less	4	43	47
14 - 1/2 hour	5	37	42
1 "	10	30	40
1 1/6 ''		2	2
2 " "	1	5	E.
	144	697	841

It will be seen that an insignificant number of teachers spend any time visiting sick pupils. More and more the duties once discharged by teachers have been taken from them and assigned to special functionaries. The introduction of medical inspection; nursing, and dental clinics in about three hundred school systems has relieved the teacher from attending to the physical needs and wants of the children. Although something has been lost through the introduction of these activities. there has, on the other hand, been a tremendous gain. There has arisen a new and impressive conception of the national and personal value of good health. This new faith in physical welfare has resulted in municipalities providing playgrounds, public baths and sanitary buildings, and in states authorizing boards of education to care for the health of children. Society is attempting to protect itself by rearing a healthier generation of people. And in so far as this applies to the teacher, it means that the time heretofore devoted to activities for which he had no special training, can now be directed to actual classroom management and instruction—the things in which he is presumably an expert.

TABLE LXVII.—DISTRIBUTION OF TEACHERS ACCORDING TO THE NUMBER OF HOURS THEY DEVOTE EACH WEEK TO CHURCH AND SUNDAY SCHOOL.

	Men	Women	Total
None	50	. 181	231
½ hour	4	15	19
1 "	52	366	418
1 ½ "	10	155	165
9 "	101	650	751
2½ "	5	58	63
8 "	68	471	539
	41	284	325
4 '' 5 ''	13	168	181
в "	24	152	176
7 "		31	34
8 "	8 8 1 5 2	63	71
9 "	1	6	7
10 "	<u>.</u>	13	18
12 "	3	10	10
16 "	2	0	10
10	1	8 1 5 1	4
20		5	2 5 2 1
44	1		2
26 ''		1	1
		0000	2010
	389	2629	3018
Median	2 hours	2 hours	2 hours.

About two-thirds of the teachers give some time each week to church and Sunday-school work, and one-half of them devote two or more hours per week to this kind of work. We doubt if there is another group of professional workers who take such an active interest in the religious work of the community.

TABLE LXVIII.—DISTRIBUTION OF TEACHERS ACCORDING TO WHETHER THEY ARE EXPECTED OR REQUIRED TO DEVOTE TIME TO CHURCH AND SUNDAY SCHOOL WORK.

	Men	Women	Total
Not answered No Expected Required	198 115	1172 1180 775 103	1962 1378 890 109
	569	2770	4339

Nearly two thousand of these included in the above Table failed to indicate whether church and Sundayschool work is required. It seems fair to assume that a majority of them are not expected to participate in this work. Thirteen hundred seventy-eight stated definitely that church work is not expected or demanded, while about one-fifth of the total number replying, indicate that work of this sort is expected. A comparatively small number, 109, say that it is mandatory and of this number 103 are women.

CONCLUSIONS.

1. Seventy-five percent of the teachers in Illinois are native to the state. Thirty percent spent their childhood in the country and forty-four percent grew up amid urban influences. More than three-fourths of the teachers come from English speaking families, but one-fifth are from homes in which German, Swedish, Irish, French, or other European languages are spoken.

2. In reference to parental occupation, Illinois teachers follow the typical distribution for American teachers and for the general population of the United States. Fifty-one percent of the teachers are sons and

daughters of farmers and artisans.

3. The median parental income is \$809 for the men, and \$795 for the women teachers. More than fifty percent of the teachers come from families that average six or seven in number.

4. The training of the typical Illinois man teacher consists of 4 years in high school, 2 years in Normal school, and 4 years in college; the typical Illinois woman teacher has been 4 years in high school, 1 year in normal school, and 2 years in college. Each additional year of training increases the salary in varying amounts from \$50 to \$825, according to whether the added training is in the high school or in the graduate school of the university.

5. The prime motive with which men enter the profession is an admiration for the profession; that which forces most of the women to teach is economic necessity. The relative importance of these two motives as reasons

for remaining in the profession is the same as for entering; "liking for the profession" is first with the men and second with the women; "financial motive" is first with the women and second with the men. The professional motive for entering increases up to 30 years, while the salary motive is strongest from 30 years on. The professional motive for remaining declines after 40 years of age, while the salary motive grows stronger from that age on.

6. Fifty-six percent of the women and 45 percent of the men begin teaching when they are between 18 and 20 years of age. The amount of parental income has slight, if any, influence upon the beginning age of teachers.

7. In the main, men teach in rural or high schools. Twelve percent of them are in grammar schools as principals of buildings. Women are found most in rural schools and in the primary and intermediate grades of town and city schools.

8. The professional experience of the median Illinois man teacher consists of 3 years in 2 country schools, 3 years in 1 town school, and 5 years in 1 city school; while that of the woman consists of 2 years in 2 country schools, 3 years in 1 town school, 5 years in 1 city school. The median salary for men is \$529.34; for women \$506.67.

9. Fifty percent of the men are at present between the ages of 24 and 38 years, the median age is 29. Fifty percent of the women are between 22 and 35 years of age, for them the median is 26 years, 9 months.

10. Twenty-two percent of the unmarried women teach in their home town. As a means of more economical living, 61 percent of the women and 56 percent of the men live with parents, and an additional 9 percent of the men and 20 percent of the women live with relatives. More than 30 percent of those living with

parents or relatives do not spend the week end/in the community in which they teach.

11. Fifty percent of the women pay from \$3.50 to \$5.50 a week for board. The median cost of board for women is \$4.40. The limits of the 50 percentile for men are \$3.25 and \$4.95. For them, the median cost is \$4.20.

12. Nearly half of the teachers board less than half a mile from their schools. The median distance is

three-fourths of a mile.

- 13. Thirty-six percent of the married teachers own their homes. Forty percent are prevented from ownership on account of insecurity of tenure. The median rent is \$16.37 for men and \$11 for women.
- 14. The size of the family for married teachers ranges from 2 to 10 members. The median, however, is 4.
- 15. Fourteen percent of the teachers in Illinois have 1 or more people totally dependent upon them and 24 percent have 1 or more partially dependent upon them.
- 16. Less than one-fifth of the teachers spend their vacation in cultural pursuits. Forty-four percent of the men work during the vacation and 29 percent of the women help at home.
- 17. Half of the men and one-eighth of the women are forced to earn money from sources other than their salary. In order to meet their expenses, men earn an additional median income of \$231.77; the women, \$107.66.
- 18. For reading circle books, magazines, teachers' meetings and similar means of cultivation, the men spend an average of \$15; the women \$10.
- 19. Thirty percent of the men and 90 percent of the women carry no life insurance. For those who are insured, the median for men is \$2,000; for women, \$1,000.

20. For the last five years, the median amount of annual savings for men has been \$194. Nearly half of them have either saved nothing or did not answer the question, which probably means no saving at all. Fifty-eight percent of the women have no savings. For those who have been able to put aside money, the median is \$99.15 a year.

21. The teacher's recreations during the past three summers have been largely travel and visiting; 58 percent of the elementary school teachers and 62 percent of the high school teachers traveled somewhere, although

over 50 percent of these trips were short trips.

22. The recreations of teachers also tend towards professional improvement as shown by the 26 percent who have attended school or studied during the past three summers.

23. The reading of teachers during a two year period was largely professional in character, 42 percent of all books read being professional books. The reading of the men during the two-year period averaged three books, while that of the women averaged 2.3 books.

24. The best Illinois teachers spend from one to two hours in daily preparation of lessons, one hour per day in grading manuscripts, very little time in collecting materials, and practically no time in visiting parents or sick pupils. They also devote two hours per week to church and Sunday-school work, although such work is neither expected nor required.

ILLINOIS SCHOOL SURVEY

REPORT ON PROGRAM OF STUDIES IN TOWN AND CITY GRADED ELE-MENTARY SCHOOLS

W. C. BAGLEY, UNIVERSITY OF ILLINOIS

I

Introduction

The Illinois School Survey projected an extensive investigation of the curriculums and courses of study in all types of public schools. It was hoped that time and money might be available for the prosecution of such an investigation, and that as a result of this work a comprehensive summary of conditions throughout the state might be presented as a basis for equally comprehensive proposals looking toward improvements and reforms. The limitations of both time and money precluded the realization of these larger plans. Initial studies, however, were undertaken upon the basis of questionnaires sent to teachers in the various types of schools, and the report presented in the following pages is a summary of some of the data obtained in this way.

It was hoped that a questionnaire regarding the program of studies could be placed in the hands of every public-school teacher in the state, and that replies could be obtained in sufficient number to permit the determination of significant tendencies. It was soon found, however, that an effort to reach all of the rural-school teachers would involve expenditures for which funds were not available. Questionnaires, however, could readily be distributed by town and city principals and superintendents to teachers in graded elementary schools and in high schools, and the investigation was finally limited to

these two types of schools. The present report deals only with certain of the data obtained from teachers in town and city elementary schools. The large mass of material in hand, and the time and labor involved in working it over have precluded a complete report at this time. The present report is limited largely to those sections of the available material that most readily lent themselves to simple statistical organization, and the treatment of which seemed most likely to yield valid generalizations.

II

THE QUESTIONNAIRE

The questionnaire sent to teachers in town and city graded elementary schools was as follows:

TOPIC VI. PROGRAM OF STUDIES

QUESTION-SHEET "2-A" FOR ELEMENTARY SCHOOL TEACHERS

NOTE: It is hoped that every elementary school teacher in the State will furnish the information asked for on this sheet. The value of the Survey will depend absolutely upon the fidelity with which the information asked for is furnished. No names need be given; the Survey is impersonal; but the facts, if given fully and frankly, will be of inestimable value in constructing a working program for school improvement.

FACTS REGARDING THE TEACHER "WHO RECEIVES THIS QUESTION SHEET:

(NOTE: Wherever possible underline the words that apply to your case.)

Sex: Male; Female. Age at nearest birthday......

Present annual salary......

Teaching experience: Total in years..... and months.....

Experience in rural ungraded schools.....years.....months

Experience in graded town, village or consolidated schools

.....years.....months. Length of time in present position.....years.....months.

Education and Training: How many years did you attend elementary school (first eight grades)?.... How long did you attend high school?.... Did you graduate from high school?..... (If you attended private elementary schools, private

high schools, or academy, state length of time attendedyears; and what schools.....

If you attended normal school or training school, state number of years.....and months..., attended. Did you graduate?..... How many months did you have practice teaching in your normal course?.... State name and location of normal or training school attended......

	If you have attended college or university, state number of yearsand monthsattended. Did you graduate!From what course!
	If you have attended summer schools or summer sessions which you have not included in the above statements, please state how many weeks in all you have attended such schools Names and locations of summer schools
	attended If you have attended other institutions, state what institutions, and how long attended Estimated cost of your education and training beyond the high school, including specific items, as cost of tuition, books, board and room, etc; and estimated cost of time as measured by the amount that you could have earned at productive employment during this period of training
Facts Nai	REGARDING THE SCHOOL IN WHICH YOU ARE NOW TEACHING: me of school
	Total number of pupils in the entire school
	REGARDING THE PUPILS AND SUBJECTS THAT YOU ARE NOW TEACHING:
Wh	at "grades" do you have in your room?

a committee of the State Teachers' Association	n), please
answer the following questions: By whom was	the course
prepared?	
When was it published?	
In what ways have you found it necessary or ac	lvisable to
modify the requirements of the course of study	within the
past year?	WIGHIH OHE
What provisions does the course of study make for th	tonohima
of the following subjects:	ie teaching
of the following subjects:	
a) Agriculture: If the subject is offered to you	r pupus 18
it required or optional (underline)? Dou	you use a
text-book? If so, what text	
Do you have actual work in gardening	<u>In</u>
seed testing In milk testing	In
judging stock In scoring corn or	
products In making root-grafts, et	
What proportion of the work is text-book	
what proportion is made up of practical exer	rcises ?
b) Domestic science and domestic art: If this	subject is
offered to your pupils, is it required or opt	tional with
the girls? What proportion of the	e girls in
your room take work of this sort? W	hat work is
offered (underline): sewing, cooking, home	decoration
Do you use a text-book? I	f so, what
text? What proportion	of the time
is given to text-book work? What	proportion
to practical exercises? What equ	ipment do
you have in your school for this work? S	ewing ma-
chines; range; cooking utensils. Other	equipment
	oquipmon
c) Manual Training including handwork of	all types
c) Manual Training, including handwork of (woodwork, paper-cutting, basketry, clay n	an types
Underline) Is the work required of	r ontional
What proportion of the pupils	toko thia
work? What proportion of the tot	ol time de
they spend upon it? Do you teach	this work
or is a special teacher provided?	Who h
equipment has your school for this work?	owing orb
In what way (if at all) is your teaching of the foll jects determined by the peculiar needs and op	owing sub-
of the local community or district served by the s	portunities
A criculture	CHOO1:
Agriculture Physiology and hy	giene
Manual training Civil government.	• • • • • • • • • •
Arithmetic History	
Geography Language	

any) do you make in dealing with a) Exceptionally bright pupils?

What modifications of the course-of-study requirements (if

b) Dull pupils? c) Pupils who are two or more years older than the average of the class? d) Other exceptional or abnormal pupils? What suggestions can you make for improving the course of study a) What subjects, if any, would you add to the requirements for the grade or grades that you teach? b) What subjects, if any, would you omit and why? c) What topics in different subjects would you omit? d) Is the course sufficiently detailed and specific? 1) With regard to the ground to be covered each term, half-year, or year? 2) With regard to the suggestions that it makes for actual presentation of each subject? e) Do you prefer (1) a detailed printed course of study, stating explicitly the ground that should be covered in each subject for each term or half year, with very concrete suggestions for teaching each topic; or (2) a general outline which would leave you largely to your own resources in determining how much ground to cover and how to present the material? What suggestions have you made regarding the improvement or modification of the course of study, and to what authorities have you made these suggestions? How were the suggestions received? How many hours a week do you spend on the average in preparing outside of school hours for school work?..... What is your basis for determining whether a pupil shall be promoted or held back a) How often are promotions made?..... b) What subjects, if any, do you disregard entirely in determining promotion from grade to grade ?..... c) In what sbujects, if any, do you require a final examination? d) How much does the examination grade count in determining "passing"?..... How much does "daily work'' count?...... How much does your own judgment as to pupils' fitness for the next grade count?..... Do you talk over the matter of pro-

motions with principal, superintendent or other supervisor?..... Do you grade the final examination

In who	papers?	yourself? if any, do yo			
Hoy	w much in	each subject?	u require no	ine work?.	
What,	in general	, is the attitue ool studies?	de of the pa	arents towa	rd "home
		ide of the peo			
	Taking pu tries, g interest? How ma	pils on excurs eographical constripts of the	ions to stud	ly neighbor r other o	ing indus- bjects of
b)	What is the school was What su	he attitude of fork more "pagestions, if a	the parent ractical''?. any, have th	s toward n	naking the
	have "or	pening exercise That is the gen	es''	For h	ow long a
ACTS REC	GARDING TI	EXT-BOOKS US	ED BY YOUR	PUPILS:	
	list the bod so far as	ooks in the sp		nd give the	facts de-
	Cro do	Name of	Date	Data of	Datase
Vame of	in	author and	lication	first	
ubject	which	4:476		0.000.00	сору-
	book is used	book	printed on title page	right¹	right¹
iately fol	lowing the	copyright is to title-page. 1912 (or what	Usually the	statement	is "Copy-
Please	give the	number of pa	ges (for ex	ample, "P	p. 1-76'')
cov	ered in the	e various text	s during a	term.	Ī, i
		term in week			
	Pages cov	ered	• • • • • • • • • • • • • • • • • • • •		
ACTS REC	GARDING TH	E DAILY PROG	RAM		

Please insert here a copy of your daily program or time-table: For example (supposing that you have in your room Grades V and VI)

	Grade V	Grade VI
9:00- 9:10	Opening	exercises
9:10- 9:35	Study Arithmetic	Recite Arithmetic
9:35-10:00	Recite Arithmetic	Study Geography
10:00-10:25	Study Geography	Recite Geography
10:25-10:40	Re	cess
and so on for t	he rest of the day.	

FACTS REGARDING DISTRIBUTION OF TIME MINUTES PER WEEK

Insert under each grade opposite the name of the subject the exact number of minutes devoted to recitations each week.

 Subjects
 GRADES

 of
 Study
 1 2 3 4 5 6 7 8

In all, 2,690 usable replies were received to this questionnaire. Of these, 67 were from teachers in ungraded schools, 49 from kindergartners, and 209 from teachers who could not be readily classified according to grade or

grades taught.

In the classifications which follow, all "general" distributions comprise certain small proportions of data furnished by these three last-named groups of teachers; the distributions according to grade-groups include, of course, only replies from those teachers who could be definitely classified according to grade or grades taught. In view of the fact that two-thirds of the graded schools represented in this report have semi-annual promotions and are consequently likely to have two classes in each room, it frequently happened that a teacher's reply covered the work of two successive grades. The following classification of teachers by "grade-groups" was therefore utilized in many of the distributions: teachers in charge of 1st-grade rooms, 1st and 2d-grade rooms, and 2d-grade rooms; (b) teachers in charge of 2d and 3d-grade rooms, 3d-grade rooms, and 3d and 4thgrade rooms; (c) teachers in charge of 4th-grade rooms, 4th and 5th-grade rooms, and 5th-grade rooms: (d) teachers in charge of 5th and 6th-grade rooms, 6th-grade rooms, and 6th and 7th-grade rooms: (e) teachers in charge of 7th-grade rooms, 7th and 8th-grade rooms, and 8th-grade rooms. This classification yields five gradegroups, each representing the work of parts of two or three successive school years.

The replies from which the data were obtained repre-

sent chiefly the following towns and cities:

Adams County: Quincy Alexander County: Cairo,

Thebes.

Boone County: Belvidere. Cass County: Beardstown. Champaign County: Champaign.

Coles County: Charleston,

Mattoon.

Cook County: Chicago (70 elementary schools), Evanston, Oak Park, Cicero, Forest Park, Maywood, Morgan Park, Melrose Park, Cliole, Riverside, Kensington, Berwyn, Hawthorne.

De Kalb County: De Kalb. DeWitt County: Clinton.

DuPage County: Naperville, Hinsdale.

Edgar County: Paris.

Ford County: Gibson City. Fulton County: Canton. Grundy County: Morris,

Mazon.

Henry County: Kewanee Iroquois County: Milford. Jackson County: Murphys-

boro, Carbondale.

La Salle County: La Salle, Streator.

Livingston County: Pon-

McHenry County: Har-

vard.

McLean County: Bloomington.

Macon County: Decatur.

Madison County: Alton, Collinsville, Venice, Granite City.

Marion County: Centralia.
Mason County: Havana.
Morgan County: Jackson-

ville.

Peoria County: Peoria.
Rock Island County: Mo-

line.

Sangamon County: Spring field, Pawnee.

St. Clair County: Belleville.

Stephenson County: Free-port.

Union County: Anna.

Vermilion County: Danville, Hoopeston.

Wabash County: Mt. Carmel.

Kane County: Aurora, Batavia, Dundee, Geneva, Elgin.

Kankakee County: Kankakee.

Knox ('ounty: Galesburg. Lake County: Highland Park, Lake Forest. Warren County: Monmouth.

Will County: Joliet.

Williamson County: Marion, Herrin.

Winnebago County: Rockford.

In all, then, seventy-one towns and cities located in forty-two out of the one hundred two counties of Illinois are represented by the replies. The important point, however, is that the distribution is fairly uniform throughout the entire state. The data to be presented, then, may be considered fairly typical of the situation in the graded elementary schools of the larger town and city school systems.

III

GENERAL CHARACTERISTICS OF THE TEACHERS IN THE ELEMENTARY SCHOOLS OF ILLINOIS TOWNS AND CITIES

The supplementary information obtained through the questionnaire revealed certain tendencies regarding the age, salaries, experience, and training of the teachers in the elementary schools of the towns and cities, as well as certain facts regarding the character of the communities, the size of the various schools, the size of classes, etc.

Especially significant to the chief problem of the present study are the facts regarding the age, salaries, experience, and training of the teachers, and the facts concerning the size of classes.

a) Significant facts regarding age, salaries, and training of teachers employed in the town and city graded elementary schools are shown in Tables I, II, III, and IV.

In these and the following tables, black-faced numerals indicate in each case the approximate location of the median.

TABLE I
DISTRIBUTION OF TEACHERS IN TOWN AND CITY SCHOOLS
AS TO PRESENT AGE

1	GENERAL	DISTRIB	HTTON	[: 2304	CASES.

Ages																		,	Cases	3																		tota
16-18																			16											 -								0.68
19-21																			232						4					 								9.98
22-24					ì		./.	ı,					ı						480	٠.	ı		ı	ı			ı.	ı				н		ı			. 4	20.60
25-27			i	,				ı		i	i	i	ì	ì	ì	ì			376		ì	ú	ì	ì			ì	ì	ì		ï	-		ı	i	Û		16.16
28-30			Ñ			ì				i	i	i	Ī	ì					285	i	Ĺ	Ĭ.	ì	ì				ì			i				i	ı	1	12.2
31-33	Ţ	ı,	ï	ì	ì				ı.	į.	Ĺ								138		Ĭ.	Ĺ	ì	Ĭ		ī		ì			i	ì		ì	i	ì	Ш	6.79
34-36																			166		ľ		Ĭ.	Ĭ.			Ĺ	Ī.			ĺ	ì	Ξ		_	ì	ı	7.14
37-39		i		ì	i.		Ŧ		į	ì	ì					ı		Ĺ	135				ï	ì	Ĩ			Ĭ				ì			i	ì	ı	5.80
																			137																			5.88
																			116																	ì		4.98
																			75																			3.22
																			46																			1.98

55-57 58-60	. 49	1.12 0.56
Over 60	2304 9	0.60

2). DISTRIBUTION AS TO AGE OF 619 TEACHERS OF FIRST-GRADE ROOMS, FIRST-AND-SECOND GRADE ROOMS, AND SECOND-GRADE ROOMS

Ages														Cases	8																		er cen
				ı						٠			٠.	6						٠											٠		. 0.9
19-21 .				×			 ٠			 ٠	۰		a (74																			.11.8
22-24 .		 ۰		 ۰			 ۰	۰			۰	۰				٠				۰			۰	۰ ،			۰	0 1					.22.2
25-27				٠				٠	 		۰			. 86																			. 13.8
28-30 .					0 1					۰				64		۰	۰		2 0	۰			۰				0	0 1	ı.		0	٠	.10.3
31-33 .					0 1									37		٠				۰		٠										٠	. 5.9
34-36				۰					 		۰			48							0 1	۰	۰								۰		. 7.7
37-89									 		w			42		0				۰		۰											. 6.7
10-42 .				٠					 	٠				34											ı,							۰	. 5.4
3-45										٠				35		۰						۰										٠	. 5.6
16-48				٠			0			٠				17						۰	0 1			0 4			۰						. 2.7
19-51 .														10		,						٠										·	. 1.6
52-54 .														18													,						. 2.1
55-57				 ۰								۰		6		٠				۰							1				۰		. 0.9
58-60			. 4				 0						0 0	4				2 0										.1.		ì			. 0.6
Over 6	0 .	٠				0 0	 ٠	. '			۰			5			6			۰						٠	٠					٠	. 0.8
														619																			99.7

3) DISTRIBUTION AS TO AGE OF 387 TEACHERS OF THIRD-GRADE ROOMS, THIRD-AND-FOURTH GRADE ROOMS, AND FOURTH-GRADE ROOMS

Ages																							(Cases																								cen
16-18																								3																								.77
19-21				,	ı	ı		ı		3			1		ı	ı			ı	ı	ı		ı	45	١,					ı,					ı												1	1.62
22-24		i	į	ì	ì		ì	ì	i	,	ì	ì	ì	ì	ì	ì	ì		ì	i			ì	113		į		i		į.		ì					i										2	9.19
25-27			i	ì	i	ì	i	i		i	ì	ì	i	ì	i	i	i	ì	ì	i	i	i		71		ĺ	i	į	į		i	ì	ì					ì		ì							1	8.34
28-30		ì	ì	ì	ì	ì	ì		ì	ì											ì	ì		55		į			ì			i	ì				i	ì	ì								1	4.21
31-33		į	ì	ì	ì	ì	ì		Ĭ	ì	ì		ì		ì		ì	ì	ì		ì	ì	ì	- 24		ľ	ì	ì	i	Ĩ		Ĭ	ì				Ĭ	Ĭ	i	ì				ı				6.20
34-36			ì	1	ì	ì	ì	ì	ì		ì	ì	ì	ì	ì	ì	ì	ì	ì			ì	i	15		ľ	Ì	ì	ì			Ĭ	ì			l	Ì	ì	i	Ĭ				ı				3.87
37-39		Ì	i	ì	ì	i	ì	ì	ì	i	į	ì	ì	ì	ì	ì	ì	ì	ì		ì	ì	ì	18		ì	Ì		Ì	Ĭ		i	ì				Ĭ	Ĭ	i	ì	Ĭ			ı				4.65
40-42		Ì	i		ì	ì	ì	ì	i	ì	ì	ì	ì	ì	ì		ì	ì	ì			ì	i	19	i	ľ	i	ů	ì	i	ì	ì	ì				ũ	ũ						ı	۰			4.90
43-45		ì	i	ì	ì	ì	ì	i	ij	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	9		i			ì	i	·	м	ч		-	•	м		•	м	м	~	4	•	•			2.32
46-48		į	Ĭ	Ĭ	ì	ì	i	i	ř.	i	Ĭ		ì	ì	ì	ì	ì	ì	i	ì	ì	i	ũ	7	Ì	i	i	ü	i	ŭ	i	i	i				ü	ì	ì				1	ı	õ			1.83
19-51		ì		i									i						Ĭ	ì	ľ	Ĭ	ı	3	ľ	ľ	ľ	ů	•	۰	ů	ì		•		ľ	ľ	ů	۰	۰	•	•	1	1				0.77
52-54		ì		ì					ì		ì								•		•			3	ů			ů	•	۰		ì				•	•	۰	•	•		•	T	I		•		0.77
55-57		۰	ï		1	•	i		ì	1	•	۰	۰		•	•		۰	•	•		۰	•	ĭ	•	•	•	۰	^	۰	•	•	•		•	r	•	•	•	•	•	•	1	ľ	ľ			0.25
58-60		۰	•	۰	٥	۰	۰	۰	•	۰	•	۰	•	•	•	•	٠	۰	•	•	•	۰	•	õ	•	۰	۰	۰	۰	۰	۰	•	0		•	•	۰	•	۰	•	•		ı	I	•	•		0.00
Over 6	0							3																1																								0.25
																							~	387																							9	9.94

4) DISTRIBUTION AS TO AGE OF 431 TEACHERS OF FOURTH-GRADE ROOMS, FOURTH-AND-FIFTH-GRADE ROOMS, AND FIFTH-GRADE ROOMS.

Ages																	C	lases]	P			ce		t	0
16-18				 														0																					
19-21																		48																			1:	1.	13
22-24																		110																			2	5.	5%
25-27		ı			ı													90		ì							i				Ċ	ı				9	20	0.	88
8-30		ı		ı	ĺ			Ĺ				Ú	Ú					50	ĺ.	•										ı	Ĺ					ú	1	1	6
1-33																		20						м														4	6
34-36				ш	м	м		м	м	•		×	М	м				33		п	-			м	м	-	м	м	ш			м	ч			ш			6
7-39																		15						-				м				м							4
0-42					м	м		м	м	м			×	×	М	•		18																				4.	
3-45																		20																٠. ١	٠.	•		4.	
6-48																		9		м	м	ч	м	м	м	-	ш	м	м		м	м	м	•	• •		,		
9-51	٠.					м							-	м			•			×	м	1	-	м	М.	м	11		м			м	м			é		1.	
		м		ш	м	м	4	м	м	ч		м	м	и	п	п		5		٠	٠	٠			٠	0	 ۰	٠			۰	٠	۰						
2-54		٠		 ٠	٠	٠		٠	٠	٠	٠.	٠	٠	٠	٠	٠.		7	٠	٠	٠	٠		 ٠	٠			٠				٠	۰					1.	
5-57		٠	٠		٠	٠		٠	٠	٠		٠	٠	٠	٠			3		٠	٠	٠			۰			٠					۰		. 1			0.	
8-60		٠			٠	٠		 ٠	٠									1		٠								٠					٠					0.	
Over 6	0			 										٠				2		٠											÷							0.	4
																		401																			-	_	0
																		431																			99	9.	91

5) DISTRIBUTION AS TO AGE OF 272 TEACHERS OF FIFTH-AND-SIXTH-GRADE ROOMS, SIXTH-GRADE ROOMS, AND SIXTH-AND-SEVENTH-GRADE ROOMS.

Ages																									Cas	ses																.]	P			ot	en al	t	0
16-18																										0												 											
19-21																										16												 										5.	8
22-24		į.	ı	ı		ı																				47				ı																	1	7.	2
25-27	i				ì																					43								a				 									1	5.	8
28-30		ı	ı																					ı,		44																					1	6.	1
31-33		ì	ì	ì	ì	ì	ı		,	ì	ı	ı			ı	,	i	į,	ı	ı	ı	ı,	ı	ı,		25									ı							u		ı				9.	1
34-36	i	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì	i	ì	ì	ì	ĺ.	į	ı	ĺ		19						Ì		i	ì	ì												6.	9
37-39		ì													ì	ì	ì	ì	ì	ì	i	j		ı		$\overline{21}$						i	ì	ì	ì	ì	ì	١.	ì	ì						Ш		7.	7
10-42	Ċ	ì	ì	ì	ì	ì																	ı			14						i	i	i	ì	ì			-		ì							5.	1
13-45					i																		ì			11						ì		Ī	ì	Ī			ì	ì	Û							4.	0
16-48	ľ	ì	ı	ï	ï	ï	ï	ï	•	ì	•	•			•								ì	ì		15						ľ		Ĭ.	ì	Ĭ						Ü		a	Ш			5.	5
49-51		•	•	•	•	•	•	•	•	•	•		٠	•	٠	•	ľ	·	ľ	•	ľ	ľ		ì		6										ì			i	ı		O		ı	Ш			$\tilde{2}$.	2
52-54		•	•	•	•	ň	1	п	М	М	ï	:	ĭ	ĭ	•	•	•	•	•	•	•	ľ	Ī	ī		5		•	•			ì			ì	ì			Ĭ.									1.	8
55-57	•	•	ı	٠	•	М									٠	٠	•	•	٠	•	ľ	ľ	i	ı		4			•			ľ		i	ì	Ĭ	ì		i			ũ						1.	4
58-60		ľ	•	•	ì	м	м	м	м	м	×	м	•	•	×	п							Į			0		٠.	•	ı	ì	ľ			ì	î				ı	i	ũ			Ш			Õ.	0
	30	٠																					Ī			2	ľ													ì	i	Ì			I.			0.	

6) DISTRIBUTION AS TO AGE OF 360 TEACHERS OF SEVENTH-GRADE ROOMS, SEVENTH-AND-EIGHTH-GRADE ROOMS, AND EIGHTH-GRADE ROOMS

Ages																									•	ase	3																			,					tota
16-18									-		Ī															1				٠																					0.2
19-21																	۰		٠						۰	6												0					0 1								1.6
22-24												ď				۰		۰	٠			,				32							,									 Ш			ı					ш	8.8
25-27			į	į	į	ı												i			ı				ì	4.6					i	ı										 ı								. 3	12.7
8-30		i	i	ì	i	į	i	ı	ı								ì		ì	i	į				ì	41					ì																			J	11.3
31-33		i	i	ì	i		ı	ı							ì	ì	ì	ì	ı	i	ı				ì	35					ı																	ш			9.7
4-36		i	ì	ì	i		i	į		ı				ı		ì	ì			ì	į		ı			35					ì	ì			ì					ı							ı				9.7
7-39	. :			ŧ.	į		ı	ı	ı						ı		ı		ı	į	ı				ì	28					ı																				7.7
10-42		i	ì	ì	i	i	ì								ì	ì	ì	ì	ì		ı			ì	ì	38					ì				ì					ı	ı			ı			Ð	ill		1	10.5
3-45		ì	į	ì		ì	ı									ì	ì	ì	į	į	ì				ì	30					ì																Ð				8.3
6-48		i		ì													ì	ì	i	i	ì				i	21																									5.8
19-51		i	i	i		i	ì											i	i	ì	ı		ì			18								ì						i	i	W		Ш	Ш	Ш	Ш	Ш	Ш		5.0
2-54		ů		i			ľ				1				٠.		ì,	٠	ı	ľ	ì			•				ì	•		•	•		1	•	•	•		٠,	í		W		П	1	Ш	П	1	Ш		4.1
5-57																													ч					и		и									и		ī				2 2
8-60		ı	*	•	ı																							•		9	1	•	*	*	*	•		•					1								1.1
over 6	0	•	•	•	Î																							•	•	•	١	•	١	•	T.	•	•	۰									*	-	0 0		0.5
,,,,		•	۰	۰	۰	۰	۰	ľ	ı				0	۰	•		۰	۰	۰	۰	ľ		۰	۰.	•			۰	٠	۰	۰		۰	٠	4	۰	٠.		9 1	ı					ı	ı	1	ı	П	1	0.0
																									ì	360																								į,	9 9

7) SUMMARY TABLE: AGE-MEDIANS

Median-age of 2304 teachers reporting is between28	and	30 y	ears
Median age of teachers of grade-group a (I, I & II, II)			
is between	and	30 y	ears
Median age of teachers of grade-group b (II & III, III,			
III & IV) is between	and	27 y	ears
Median age of teachers of grade-group c (IV, IV &			
V, V) is between	and	27 y	ears
Median age of teachers of grade-group d (V & VI, VI,			
VI & VII) is between28	and	30 y	ears
Median age of teachers of grade-group e (VII, VII &		0.0	
VIII, VIII) is between	and	36 y	ears

TABLE II.

DISTRIBUTION OF TEACHERS OF CITY AND TOWN GRADED ELEMENTARY SCHOOLS AS TO ANNUAL SALARY

1) GENERAL DISTRIBUTION: 2,548 CASES

Sa	lary												Cas	e 8													3	26	t	01	ta	n	t	0
	325 ar																																	
	326-\$																																	
8	376-8	42	5	 	٠			٠				 . :	141					۰					٠						. 1			1	5.	5
B	426-8	47	5				ı	ı		,	ij		215		э.			ı				ı				ı						-	8.	4
B	476-8	52	5		ì	 ij	ì	ì				Ę	265			ì	ì	ì			i	ì			ì		Ü					11	0.	4
	526-8																																	

\$	576-\$	625		 	:			, ,			,	. 5	324																		12.32
8	626-\$	675										. :	288								í			0		 					11.30
9	676-\$	725	ū		Ī				ì	ì	ì	J	152																		
ě	726-3	775											125																		4.90
9	776-\$	825											194																		7.61
9	826-8	875											118																		4.63
9																															2.27
\$	876-3	925			٠								58														٠				
- 3	926-\$	975			a	 ۰	۰			٠	٠	٠	33	٠	٠			٠				٠	 			 	٠	۰			1.29
\$	976-\$1	1,025		 						۰	٠	۰	33	٠		6 1							 		٠	 		۰			1.29
8	1.026 - \$1	.075		 		 	ď						20									٠	 		٥.	 		٠,			0.78
8	1.076-\$1	.125					ı				ı		25										 			 			١.		0.98
	1,126-\$1												17																		0.66
	1,176-\$1												27																		1.05
	1,226-\$1												109																		
																															0.86
	1,276-\$1												22																		0000
	1,326-\$1					 		. 1	۰	٠	٠	۰	3		۰			٠	٠			۰				٠.		٠	٠.	 	0.11
- \$	1,376 - \$1	L,475	10			 	٠		 	۰	۰		1		٠		٠.		٠	ι,		î.								 	0.04
A	bove \$1	1,425				 			 				21									,	. "							 	0.82
												-																			
												2	2,548	3																	99.49

2) DISTRIBUTION AS TO SALARY OF 669 TEACHERS IN FIRST-GRADE ROOMS, FIRST-AND-SECOND-GRADE ROOMS, AND SECOND-GRADE ROOMS.

Sa	lary											C	ase	S												1	Pe			er al	at	0
8	325 an	d u	nde	r		 		0.1					9						- 1								,				1.	3-
\$	326-\$	375											10												į.				٠		1.	49
\$	376-3	425				 							42		 																6.	2
ġ	426-\$	475											75															. :		. 3	1.	2
B	476-8	525		į.						i			72																		0.	
	526-8	575						Ĺ		Ì			61																		9.	
1	576-8	625											01																		5.5	2
R	626-\$	675											89																ì	16	3.	3
	676-\$	725	-	-	-	 м	~	-	-	м	~		86	-																	5.	
	726-\$	775											30	Ť	ı		7												i		4.	4
	776-\$	825											52		-	-		п	ш												7.	
3	826-\$	875											29	Ľ.	Ü									45					ì		4.	3
	876-\$	925		-	ч	 -	-		-	-			10	м	м	4		Ü	ш	м											1.	4
	926-\$	975	-					-					10	ů	ì							Ĭ			ì		i		i		1.	4
	976-31			-	-	 -		-	-				9	MB	-	-			-	100											1.	
1	026-\$1		-	-	ш		-	м	-	-	ч.		A																		0.	
	076-81												Ā	-	-	-	-		-	м											0.	
	.126-\$1		-	-	чч	 -	-	-	~~	м	-		0	м	-	м	-			-											0.	
	176-\$1		-	-	~~	 -	-	м	ч	м	м		7	-	ш	м			•	-	•	-	486		м		м				1.	
	.226-\$1		-	-	~~	 -	-	-		-	м		17	-	-	м				-											2.	
	.276-\$1		- 40	-	ч	 -		-	~	-	м		1																		0.	
	ove \$1		-	-		 -	4	-			м		1	•																	0.	
A. L.	0 A G 4 T	,020				 •		٠					1	•				• •									•		•	*	0.	ň
													669																	0	9.	C

3) DISTRIBUTION AS TO SALARY OF 404 TEACHERS IN SECOND-AND-THIRD-GRADE ROOMS, THIRD-GRADE ROOMS, AND THIRD-AND-FOURTH-GRADE ROOMS

Sa	lary								0						C	88	9.5													1	₽€			al		0
\$	325 an	d ui	ad	eı								 . ,			ī	8																			1	.98
ġ	326-\$	375		ı.												13			٠				÷			٠		٠						٠		.2
ġ	376-8	425		۰							۰				4	18				۰						۰	 	٠					٠			.87
ġ	426-8	475			9 1			0 1				 			4	17				10						0		2						.]	11	.63
ġ	476-8	525	i				٠				۰	9 1			į	52																		.]	12	.87
ġ	526-8	575	ı.	ì								 			Ę	51	٠,			٠			۰			٠			2 0		0 (٠			62
8	576-8	625	i	ì			,				۰	 			4	16						 ۰	۰		0 0			v		0.		2 12				.38
ġ	626-3	675	i.			i					۰	0 1			1	32		۰	۰	6			۰			D									7	
8	676-8	725	i			i	i				۰	 		of o	1	17						 ۰		0 1						1				٠		.2
ġ	726-8	775	i	ì			ì				ı		ı	J		18		į,	,														٠		4	.4:
8		825	ı,	ì		i	ì				0				2	32						 ı,													5.	4
		875													3	12	1	ì				 į.									0 1				2.	9'
		925		ì		i	ì				ì		ı			6	i	,																	1.	.48
		975	i				ì				ì		ı			2	i		ì			 ı													0.	49
	976-\$1,		i			i					ì					3																			0.	74
	026-\$1,		i	ì			ì				ì		Į			0	i	ì	ì				ì			ì					-0				0.	.01
	076-\$1.		i			i							ļ			1																			0.	24
	126-31.		i			i						 ı				0			ì		ı														0.	.00
	176-\$1.		i				ì					 ı	ı			4						 i										-	,		0.	99
	226-\$1,		Ĭ.			ì				i	ì		ı		2	21																			-5.	0
	276-\$1,															0																				.00
	ove \$1,															1																			0.	24
		,												-	4	104	1																	8	99.	78

4) DISTRIBUTION AS TO SALARY OF 482 TEACHERS IN FOURTH-GRADE ROOMS, FOURTH-AND-FIFTH-GRADE ROOMS, AND FIFTH-GRADE ROOMS

Sa	lary										Cas	es										Pe			ce al	nt	0
3	825 al	nd u	ad	01				 			2												. ,			0	.4
3	326-\$	375									11								 		 					2	.2
3	376-\$	425									28								 		 					5	.8
3	426-8	475				 ٠					55					 			 							11	.4
3	476-8	525			 			 			67								 		 					13	.8
	526-8	575									60					 			 		 					12	.4
	576-8	625	ı.			 ì	 i			ì	64		ì		 i		ì	 ú		ì		ı.		ĺ	ij	3	2
	626-8	675			 	 ì		 		ì	45	ì	i	ì	i		ì	ì		ì	 i	ı				9	
	676-8	725			ì	ì	 ú			i	25	į.	ì		i		i	 ì		i					ì	5	.1
	726-8	775			 2.1		 ì			ì	20	ĺ,	ì		ì		ì	 ı		ì						4	.1
	776-8	825	ı,				 i	 		ı	83	i	ì		ì		ì	 ì		ì		ı			ì	7	.8
	826-8	875				ì			i	ì	21	i	ì		ì		ì	 ì		ì						4	.3
3	876-8	925	i.			ì	 i	 		ì	9	ì	ì		ì		ì	 ì		ì	ı				ì	1	.8
	926-8	975					 ı	 	ı.	ì	3	ì	ì		ì		ì	 ì		ì	ı					0	6
	976-81	,025		0 4	ì		 ı,		ú	ì	2	i	ì		ì		ì			ì						0	4
1	026-\$1	.075			 					·	3															()	6
1	076-\$1	.125							ı.	ì	6	i						 i								1	2

\$1,126-\$1,175 \$1,176-\$1,225 \$1,226-\$1,275															$\frac{5}{20}$		٠											 								1.03 4.12	3
Above \$1,275	۰	•	1	ŀ	1	٠		•	٠	٠	٠	۰	٠		0	•	٠.	۰	۰	۰	۰	۰	•		٠	٠	٠	 •	. *	۰	۰	٠	۰	۰	 ٠	0.00)
															482																				9	99.47	7

5) DISTRIBUTION AS TO SALARY OF 297 TEACHERS IN FIFTH-AND-SIXTH-GRADE ROOMS, SIXTH-GRADE ROOMS, AND SIXTH-AND-SEVENTH-GRADE ROOMS

Salary													Cas	es			-									P			ce ta	nt	0
\$ 325 an	d un	de	 31	,									2		1.									, ,			5				.67
\$ 326-\$	375												1	٠.				10													.33
3 376-8	425			ı,		٠					 		7					ì			4		٠							2	.35
8 426-8	475	ì		ı	i	ì		i.	ì			į.	16																	5	.38
8 476-8	525	ì		Ţ		ì							27															٠		9	.08
\$ 526-\$	575	ì				i		i					31		ì			i												10	.43
576-\$	625	į.				ì			ì	ì	 í		40		ì					 -		 						۰		13	.43
626-8	675	ì						i.	ì			i	43							 , i						. :				14	.48
676-8	725	ü				ì			ì	ì.		ì	22																	7	.4(
726-8	775												17		ı		ı					 								5	.73
8 776-8	825		ì.						i	ì		,	26			١.						 								8	.9:
8 826-8	875	ì				ì		i	ì	ŀ		ĺ.	18		ì		ļ	i	ì											6	.00
876-8	925	ì		d		ì	ì		Ü				8		ì				ì											2	.69
926-8	975	ì				į.			į.			i	4		ì			ì			ì				 ,					1	.34
8 976-\$1	.025	ì				ì			ì		۰	i	2		ì			i			ì		ì		į.					0	.6'
81,026-\$1		ì				ì			ì	ì		ì	. 0		ì				ì	 i	ì		ì		i					0	.00
\$1,076-\$1		ì				į.		 i				i	2				ı	i.	ì		ì							ì		0	.6'
\$1,126-\$1	175											ì	5	-	ì			ì	ì		,		ì		i		i			1	.68
\$1,176-\$1	,225	ì					į.		ì	ì		ì	4		ì			i	ì						ì		i			1	.34
\$1,226-\$1													22		0.1			Ĺ							·					7	.40
Above \$1	,275							 					0									 								0	:00
												-	297																	99	99

6) DISTRIBUTION AS TO SALARY OF 414 TEACHERS IN SEVENTH-GRADE ROOMS, SEVENTH-AND-EIGHTH- GRADE ROOMS, AND EIGHTH-GRADE ROOMS

Sa	lary											Cas	es														P		ce ta	nt	oi
8	325 a	nd 1	ınd	le	r.							3	٠.													,				0.	72
\$	326-\$	375			.0		 					1		٠		٠	٠	 ٠							0.01	ı.				0.	24
\$	376-\$	425	٠.			4	 . :					. 3							ċ.										 	0.	72
\$	426-\$	475	٠.				 	į.				8												ı	i,			ď.		1.	93
\$	476-\$	525										24		E	ŭ	ì		Ĭ.			Ĭ.			Ĭ.						5.	82
\$	526-\$	575																												8.	45
\$	576-8	625		ì																										13.	
9	626-8	675	-									49																		11.	
Š	676-\$	725										36																		8.	
\$	726-\$	775										29	-	-	м	м	4	-		-	м		-	м	ш	-	м	-	ш	-	-

99.93

														۱	414												99 9
bove \$1,375	٠	٠					•	•		۰					12				 ٠								 2.8
1,326-\$1,375															1		,										 0.2
1,276-\$1,325								0							11												
1,226-\$1,275															14							ì			м		
1,176-\$1,225														ì	7							Ċ					-
1,126-\$1,175															-												
1,076-31,125															-												
1.026-\$1.075																						ì					
976-\$1.025		•	9 1	2 4			9		0		2 0	2 6			11												-
926-8 975	0	•	٠.		1		۰	•		۰	0 0		0		18							٠					
826—\$ 875 876— 8 925															27							٠					
776-\$ 825	-	•	-		-	-	-	-	м	ч		-	-	•	41							٠					

7) SUMMARY TABLE: SALARY-MEDIANS

Median salary of 2548 teachers reporting is between \$576	and	\$625
Median salary of 660 teachers of grade-group a (I, I & II, II) is between	and	8695
Median salary of 404 teachers of grade-group b (II & III,	anu	4020
III, III & IV) is between\$526	and	\$575
Median salary of 482 teachers of grade-group c (IV, IV & V, V) is between	and	\$625
Median salary of 297 teachers of grade-group d (V & VI,		0075
VI, VI & VII) is between	and	\$010
VII & VIII. VIII) is between\$676	and	\$725

TABLE III.

TEACHING EXPERIENCE OF TEACHERS IN TOWN AND CITY GRADED ELEMENTARY SCHOOLS General Distribution: 2596 Cases

Per cent of Cases Experience in total years 2- 4 years..... 572 454 8-10 11-13 283 14-16 217 17 - 19126 140 26-28 89 43 29 - 3132-34 32 24 38-40 19 41-43 44-46 More than

2,596

2) DISTRIBUTION AS TO EXPERIENCE OF 668 TEACHERS IN FIRST-GRADE, FIRST-AND-SECOND-GRADE ROOMS, AND SECOND-GRADE ROOMS

Experience													•	Cases													I	?6		a	nt	0.
Less than	2 у	ea	r	3										27																	4.	04
2- 4 year	g								ı					157				:	ı			ı							 		23.	4
5- 7 "														118																	17.	
8-10 "		м						м						73																	10.	
1-13 ''														60													i				8	9'
4-16 ''														66													i					8
7-19 ''		м	ш	м		м	*	м	м	4	м		1	27													i					0.
20-22 ''		м	-	м		м	м	м	м	4	м	м	м	37													ì					3
23-25 ''		м		м	"	м	1		-	1	м	м	1	38																		61
26-28 "								м	м		-	м	~	27													٠					04
9-31 "																											٠					
				м	*	и	м	-	м	4	-		м	11													٠					6
32-34 ''								м	м		-	м	-	9	٠	۰	 ٠	٠	٠	٠.	٠	٠		٠	٠		٠			٠		.3:
00-01				٠				٠	٠		٠	÷	٠	8	٠	٠		٠	٠			٠		٠	٠	 	٠			٠		.1:
0-40					0, 0	۰			۰		٠			9	٠		 ٠		٠			٠		٠			٠					3:
1-40				۰		۰			٠		٠	٠	٠	. 0	٠	٠		٠	٠			٠		٠		 	٠			٠	0.	.00
4-40						۰							٠	1				٠	٠							 					0.	14
More than	46						٠.							0												 					0.	.00
													-																			_
														668																	99	7

3) DISTRIBUTION AS TO EXPERIENCE OF 425 TEACHERS IN SECOND-AND-THIRD-GRADE ROOMS, THIRD-GRADE ROOMS, AND THIRD-AND-FOURTH-GRADE ROOMS

Experie	nce													C	ases											P		ce ta		0
Less th	an 2	2 y	68	r	3			. '							30		 												7	7.0
2- 4 y	ear	S								ı					128														30).1:
5- 7	2.2						Ü	ì					i	-	93															88
8-10	2.2									-	м	-	-		68															
1-13	,,										м	-			27															5.00
4-16	,,								-	м	-	-	м								٠									3.30
7-19	,,										-				27						٠									3.30
	,,				٠		٠			0			٠	۰	11	٠	 	٠	٠		 ٠		٠		٠				2	2.58
0-22	,,				۰		۰			۰			٠		19		 					 		 				 	4	1.4
3-25					۰		٠						٠		7		 		ı							 i	ì		1	1.64
6-28	, ,												ı		6															.4
9-31	2 2				,					ì			i		3						ì								-).7
2-34	2.2											-	-	~	3															
5-37	2.2												-		2						٠).70
8-40	,,							-		м	-	-	м	-							٠).4'
	an	40													1						٠								0	.23
HOLG II	159.17	40		٠.	٠	٠.	٠	9 (•	٠				۰	0			٠	٠	١.	 ٠							 		
														-															_	
															425														99	9.9

4) DISTRIBUTION AS TO EXPERIENCE OF 407 TEACHERS IN FOURTH-GRADE ROOMS, FOURTH-AND-FIFTH-GRADE AND FIFTH-GRADE ROOMS

Experience	Cases	Per cent o
Less than 2 years .		
2- 4 years		 01.11
		 3 4 0
8-10 ''	 73	 1 0 0
11-13 ''	 42	 8.8
14-16 ''	 41	 8.4
	 0.0	 4.05
20-22 ''	16	
	 10	 2.6
	 	 4 01
29-31 ''	 10	 0.0
	 - 4	
32-34	 	
35-37 . ?	 2	
		 0.20
More than 40	 1	 0.2
	497	100.4

5) DISTRIBUTION AS TO EXPERIENCE OF 286 TEACHERS IN FIFTH-AND-SIXTH-GRADE ROOMS, SIXTH-GRADE ROOMS, AND SIXTH-AND-SEVENTH-GRADE ROOMS

Experience			Cases											I	e			ce:		0
Less than 2	Vears	 	12																4	.19
2- 4 years			58							 , i									20	.2
5- 7			45	H		ш	ш							ı	Ш				15	.7
8-10 "		 	42	ш			•••		н				•						14	6
11-13 ''		 	27			• •													9	.4
14-16 "		 	24			•	01.4	• •	•	 •	• •	•	• •	٠	Ш					.3
17-19		 	27						•	 •				•		•	•			.4
11-18		 		• •	•					 •		•			•					.2
20-22		 	15					٠.			٠.		٠.	٠				٠		
60-20		 	9																	.1
20-20		 	14							e'e										.8
29-31 ''		 	7							 										.4
32-34 ''		 	5							 									1	.7
35-37 ''		 	0							 										
38-40 "		 	1																0	.3
More than	40	 	0							 										
			-																_	
			286															14	00	0

6) DISTRIBUTION AS TO EXPERIENCE OF 388 TEACHERS IN SEVENTH-GRADE ROOMS, SEVENTH-AND-EIGHTH-GRADE ROOMS, AND EIGHTH GRADE ROOMS

Experience	Cases	er cent of
	2 years 8	0.00
5-7 ''	41	10.50
11-13 ''	40	
14-16 ''	46	
20-22 ''		9.5
26-28 ''	38	0.7
29-31 '' 32-34 ''	8	
35-37 ''		2.5
38-40 '' More than	40 2	
	388	100.10

7) SUMMARY TABLE: EXPERIENCE-MEDIANS

		-
Median teaching-experience of 2596 teachers reporting is between	10	TOORS
Median teaching-experience of 668 teachers of grade-		
group a (I, I & II, II) is between	10	years
group b (II & III, III, III & IV) is between5 an	d 7	years
Median teaching-experience of 497 teachers of grade- group c (IV, IV & V, V) is between	d 7	vears
Median teaching-experience of 286 teachers of grade- group d (V & VI, VI, VI & VII) is between8 and		
Median teaching-experience of 388 teachers of grade-		
group e (VII VII & VIII VIII) is between 14 and	16	VASTE

TABLE IV.

DISTRIBUTION OF 2,391 TEACHERS IN TOWN AND CITY GRADED ELEMENTARY SCHOOLS AS TO NUMBER OF YEARS IN PRESENT POSITION

Years in position	n	se	n	t					: '	Cases											P		ta		0
Less than	2	ye	aı	°g						513									 					21	.4'
2- 4 year	S.					 				775									 					32	.44
5- 7 ''										343									 					14	1.3
										251															
11-13 ''										131															5.4
14-16 ''	. 4									100	i	i	ì		ì	ì		ì		ì		ш		. 4	19

7-19 ''																79				٠	٠	۰	٠	۰	۰	 					e	0		0	0		. 3	
0-22 ''			ı,													75			٠							 											(2
3-25 ''					ı,	ı	 ı		ı.	ı	ı	ı	ı			49			٠														٠	ċ			. 2	3.(
6-28 ''			ĺ						ı	ĺ						28	ı,	ĺ	ĺ	ĺ	ı	ı															. 1	
9-31 ''	i.		i	ũ	ı	ı				ì	ì	ì	ì	ì		16	i		i	ì	ú	ú	i						٠							n. 1	. ().(
2-34 ''							ı			ì	ì	ì	ì	ì		11	i	ì	ì		ì	ì															. ().4
5-37 ''																																						
8-40. ''	•		•	ı	ı	ı				i	i	i	Ĭ	ï		2	i	Ĭ	i	ì	ì	ì	i					ı		ĺ	ì		ì				. ().(
lore than	4	o o			ì	ì	ı	ŧ				·		ì		4							Ü														. ().:
															-	_																					-	
														9	2 3	89																					99	9.5

b) Training of Teachers in Town and City Graded Elementary Schools. Of the 2,690 replying to the questionnaire, 1,705 reported that they had attended normal school, and 502 reported that they had attended college. A certain proportion of the college group had also attended normal school, and are included in the former total. Of the 1,705 who attended normal school, 1,619 stated the number of months' attendance; the distribution is as follows:

TABLE V.

DISTRIBUTION OF 1619 TEACHERS AS TO LENGTH OF NORMALSCHOOL TRAINING

			Cases								P		cent al	of
Attended	3 months of													
1 1	3→ 6 month													
,,	6-9 ''		458										.28	
,,													.38	
,,	18-27												.11	
	more than 27 r	nonths	65	٠.	٠	 ٠	 ٠	 ۰				 ۰	. 4	.01
		i	,619										98	.30

The 502 teachers reporting attendance at college are distributed as follows in respect of the period covered by attendance:

TABLE VI.—DISTRIBUTION OF 502 TEACHERS AS TO LENGTH OF COLLEGE TRAINING

														(28	180	es				P	0	r	C	er	ıt	4	of	te	ota
Attended																														
"	1-2	years				è									. :	13	9												27	.68
	2-3	• • • •					. :									5	7		 		٠								11	.15
	3-4	٠,			8	9.					 					8	5		 	 ۰									16	.93
	more	than	4	У	es	ır	S.	 ٠						٠.		1	4	٠		 ٠		٠						٠	2	.78
														ì	į	50	2												99	.77

In both normal-school and college groups as reported above, attendance at summer schools and summer sessions should not have been included, but it is probable that the attendance as stated above includes a certain proportion of summer residents. It is noteworthy, however, that 1,158 teachers out of the total of 2,690 specifically report attendance upon summer courses. The average number of weeks' attendance is 12.5.

Thirteen hundred sixty-nine teachers estimated the money-cost of their education above the high school. The average of these estimates is \$509.82, but the variations are so wide that the average has little significance. There are distinctive "modes" in the distribution of the various amounts named.

c) Size of Classes. The following table shows the distribution of teachers according to the number of pupils under their direct charge. The general distribution as given in the first section of the table includes 59 teachers who were not classified acording to grade or grades taught, and 64 teachers in ungraded schools.

TABLE VII.—DISTRIBUTION OF TEACHERS OF TOWN AND CITY GRADED ELEMENTARY SCHOOLS AS TO NUMBER OF PUPILS IN ROOM

1) GENERAL DISTRIBUTION: 2416 CASES.

Number of pupils		Cases	 Per	cent of	total
Fewer than 15	 	20	 		0.82
15-20	 	97	 		4.01
21-25	 	135	 		5.58

6-30																																					
1-35																																					
6-40	١.	۰		۰					۰	٠						0		٠	575		۰		٠	 	۰		٠			0 1		.0	h		2	3.	7
1-45	٠.							٠	٠		0 1		 ۰		٠	۰	۰	۰	414		۰	۰							 						1'	7.	1
6-50		٠								۰	0 1			۰	۰			۰	281		۰					۰		:	 						1	1.	6
1 - 55				٠			×		٠						4				96			۰		 	 ٠								۰		2	3.	9
6-60		٠												۰				٠	44					 		۰			 				·			1.	8
fore	th	8	1	ľ	3().	۰		۰					۰			۰		33	۰					۰	٠			 							1.	3
																																			-	_	
																			416																91	9	9

2) DISTRIBUTION AS TO NUMBER OF PUPILS IN ROOM OF 40 KINDERGARTNERS

Number of pupils C	ases	Per	cent of total
Fewer than 15	0		
15-20	1		2.50
21-25	2		5.00
26–30	1		2.50
31–35			7.50
36-40			
41-45			15.00
46-50			30.00
51-55			
56-60			
More than 60			10.00
	40		100.0

3) DISTRIBUTION AS TO NUMBER OF PUPILS IN ROOM OF 676 TEACHERS IN FIRST-GRADE ROOMS, FIRST-AND-SECOND-GRADE ROOMS, AND SECOND-GRADE ROOMS.

Numbe	er	(f	1	91	u	p	il	8															(Cases														P	eı		C	e 1	ıt		of	ŧ	ota
Fewer	tl	18	n		1	. 5							۰			۰		٠							1																						0	1.14
15-20								٠				ı,		٠		٠		۰	,	٠			,		20						٠									ı							2	.95
21-25		٠	٠			٠	۰						۰												33																							.8
6-30									٠	ı															72																ı						10	0.6
1-35						ì		ı	į	i		į,	ı,		ı	ì	ì	ì	ì		ì	ì			133																							.6
6-40		i									i	i													160	i	į	ú	ì	i	ì	ì		ì											ì		23	.6
1-45				ì	ì	ì	ì	ì		i		ı		ì		ì	ì	ì		ì	ì	ì	ì		113	ì	ì	ì	ì	ì	ì	ì									ı				ú		16	.7
6-50																									75	ì	Ī	i		ì		ì		ì	ì		ı								ı,	i	11	.0
1-55		i			ì	ì	ì	ì	į	i	i	ì	ì	ì	ì	ì	ì	ì	ì	ì		ì			31	ì	ì	ì	ì	ì	ì	ì	ì	ì	ì					ì	a						4	.5
6-60																									24	ú	ì	i		ì	ì	ì	ì	ì				i	ì	·	l					ì	3	.5
More :																									14															ì							2	.0
																																																-
																									676																					-	99	95

4) DISTRIBUTION AS TO "NUMBER OF PUPILS IN ROOM" OF 410 TEACHERS IN SECOND-AND-THIRD-GRADE ROOMS, THIRD-GRADE ROOMS, AND THIRD-AND-FOURTH GRADE ROOMS

Numbe	r	f	p	u	p	il	8										•	Dases										P	eı		c	eı	nt	oi	t	tota
Fewer	th	Bn		1.	5						10							0					,		 											0.0
15-20				1														4	: .						 					ı						9.7
21-25				14				,	. ,	ı,	b				,			17		۰				٠												4.0
26-30																		39			٠				 ٠.					ı,						9.5
31-35					1									٠		,		67							 										1	6.3
36-40										ı								105							 	 									2	5.6
11-45				٠								÷						82																		0.
16-50										. ,				٠				61												ď					1	4.8
51 - 55															,			21		٠																5.1
66-60							٠		ı						,			7								 		٠		ı						1.7
More t	har	1	60) .											i			7	 ı.																	1.7
																																			-	_
																		410																	9	9.8

5) DISTRIBUTION AS TO "NUMBER OF PUPILS IN ROOM" OF 476 TEACHERS IN FOURTH-GRADE ROOMS, FOURTH-AND-FIFTH-GRADE ROOMS, AND FIFTH-GRADE ROOMS.

Numbe	er e	of	p	uŗ	ì	ls								Cases									I	9	r	•	e	n	ŧ	of	K	tota
Fewer	th	an	1	5			 :							 . 0				 														
15-20		٠,											 	 9		٠		 		. '	 										- 1	1.89
21 - 25		* 1					٠.	 						14		٠	٠	 	٠		 										1	2.9
26-30		٠.			. ,								 	 31				 		:0	 											6.5
31-35							£.							 105				 			 										2	2.0
36-40						ı					. :			120				 			 										2	5.2
41-45										,2			 	 118						٠											2	4.7
16-50				1			٠,	 					 	55				 			 										1	1.5
51-55												ί.	 	 19				 			 										-	3.99
56-60													 	 3				 														0.6
More t	tha	n	6	0.					 					 2					٠		 	٠										0.4
																															-	
														476										1							9	9.9

6) DISTRIBUTION AS TO "NUMBER OF PUPILS IN ROOM" OF 306 TEACHERS IN FIFTH-AND-SIXTH-GRADE ROOMS, SIXTH-GRADE ROOMS, AND SIXTH-AND-SEVENTH-GRADE ROOMS.

Numbe	er	o	Ê	p	u	p	il	8												Cas	ses													P	er	CE	n	t	0	f	tota
Fewer	tl	18	n		1	5											_				0															 					0.0
15-20				ı		Ī.	ì				į,								ĺ,																						2.2
21-25						i						į.				 					19				٠											 ١.					6.2
26-30	i.				ì	i		ì				ì	ì								39				,								٠			 				. 1	2.7
31-35	ì				Ì	ė.	ì	ì			i	ì	ì	ì							59	ı,	ı	٠.										ě.		 				. 1	9.2
36-40					ì	i	ì	ì	ì		i	ì		ì						8	84	1				ì	ĸ.								,	 				. 2	27.4
11-45	i					Ĭ.	i	Ĺ	Ĭ		Ĺ	į	ì	Ĭ	ì		ı	ı		į	50				ì	ì	. '	ı				Ų.		٠		 				. 1	16.3
16-50					Ì	i	ì	ì	ì		Ī	ì	ì	1	ì					. 1	35				ì	ì	ì		ı						,	 				. 1	11.4
51-55																					12				ì	ì	ì			ĺ.											3.9
6-60	-		-			-	м	•	м	м	-				м	-					1																				0.3

More than 60	0.00
300	99.96

7) DISTRIBUTION AS TO "NUMBER OF PUPILS IN ROOM" OF 394 TEACHERS IN SEVENTH-GRADE ROOMS, SEVENTH-AND-EIGHTH-GRADE ROOMS, AND EIGHTH-GRADE ROOMS

Numbe	er	01	f	P	u	p	il	ls													C	a	808																1	9			ti		r	
Fewer	th	8.1	D.	1	LE	5.																	0																							.0
15-20					۰		٠		۰					0		٠		u					23	٠			٠			ı,		٠					۰	٠	۰		۰	è				8.8
21-25						ı	٠							ı									30				٠					٠					۰		۰	٠		٠			7	.6
26-30				ì	ì	ì		ì	ì					i			i		i	i	i	и	65	ı,	ı	ı	ı			۰		и	ı					ı			ı			. 1	16	.4
31-35				ì																			81	i	ı	,	ì											ı								.5
36-40																							82				ì					ì					Ĭ							5	30	3.0
11-45			ì	ì	м	м	м		ч								м				м		57																							.4
16-50	ı.		ì	ů	i	ì	ì		-							м	м						36	ľ	ů	ů	ì					ì	ì		۰			ũ			ì					۳
51-55	•	•	•	·	ů	۰	۰	۰	۰	۰	•			ľ	ľ	ů	ů	۰	ľ	ľ	•	•	55	ľ	۰	۰	ľ	ï	•			ů	ï	1			ů	П	۰	۰	۰	ì		1	9	. 0
56-60	•	•	ı	۰	•	۰	٠	۰	۰	•	•	_	ı	ľ	•	•	•	٠	۰	•	•	•	A	·	•		D	•		ı	ľ	•	•		Т	•	•	ı	۰	۰	•	٠	•	•		í
Over	60													i									4																						-	.0
																							304																						-0	0

8) SUMMARY TABLE: MEDIAN "NUMBER OF PUPILS IN ROOM"

			-
Median number of pupils in rooms of 2,416 teachers report-			
ing is between	36	and	40
Median number of pupils in rooms of 676 teachers of grade-			
group a (I, I & II, II) is between	36	and	40
Median number of pupils in rooms of 410 teachers of grade-			
group b (II & III, III & IV) is between	36	and	40
Median number of pupils in rooms of 476 teachers of grade-			
group c (IV, IV & V, V) is between	36	and	40
Median number of pupils in rooms of 306 teachers of grade-			
group d (V & VI, VI, VI & VII) is between	36	and	40
Median number of pupils in rooms of 394 teachers of grade-			
group e (VII, VII & VIII, VIII) is between	31	and	35

INFERENCES FROM, AND INTERPRETATIONS OF, THE SUP-PLEMENTARY DATA PRESENTED IN THE ABOVE TABLES

1. The teachers in the town and city graded elementary schools represented in this study are in general significantly more mature than are elementary-school teachers in the smaller towns and villages and in the rural districts. The median age of the former group

falls between 28 and 30 years; the median age of elementary-school teachers for the state as a whole is 29

years for men and 27 years for women.

2. The more immature teachers of the town and city elementary schools are predominantly those of Gradegroup b (III, III and IV, IV) and Grade-group c (IV and V, and V), or the lower-intermediate grades. The typical teacher in these grades is between 25 and 27 years old. The typical teacher of grade-group a (primary) and the typical teacher of the Grade-group d (V and VI, VI, VI and VII) are two years older than the typical lower-intermediate teacher. The typical teacher of Grade-group e (VII, VII and VII, VIII) is seven years older than the typical lower-intermediate teacher, and five years older than the typical primary teacher.

3. The same general contrasts are apparent in the data regarding salaries. The typical teacher in the town and city elementary schools receives between \$576 and \$625 for her year's work; the median salary for elementary teachers in the state as a whole is \$529 for men

and \$507 for women.

- 4. The lowest salaries in the town and city elementary schools are paid generally to teachers in Gradegroup b (II and III, III, III and IV). The typical primary teacher and the typical teacher of Grade-group c (IV, IV and V, V) receive about the same salary (between \$576 and \$625); the typical teacher in Gradegroup d, however, receives fifty dollars more, and the typical seventh or eighth-grade teacher one hundred dollars more.
- 5. The experience of the typical teacher in the town and city elementary schools has been more extensive than the median experience of the elementary school teachers of the state as a whole. The median for the former group lies between five and eight years, of the latter group between three and five years.

6. In the town and city schools, the teachers with the least experience are found in grade-groups b and c,—the lower-intermediate—where the median experience is between five and seven years. Primary teachers and fifth and sixth-grade teachers again fall together, the median experience of both groups being between eight and ten years. The typical seventh and eighth-grade teachers, however, has had six years' more experience than the typical primary or the typical fifth and sixth-grade teacher, and nine years more experience than the typical lower-intermediate teacher.

7. The training of the typical town and city elementary-school teacher has undoubtedly been more extensive than the training of the typical teacher in elementary schools outside of the towns and cities. There is no marked difference in respect of training, however, among the teachers of the various grade-groups in the town and

city systems.

8. There is a notable similarity in the median number of pupils in the classrooms of the different gradegroups, the only marked exception being the slightly smaller classes in the seventh and eighth grades.

TV

Data Referring to Program of Studies

The Proportion of Pupils Having Difficulty in Completing Work Prescribed in Elementary Curriculum. In all, 1,349 teachers reported as to the proportion of pupils who find difficulty in completing the prescribed work of the elementary program. The following table presents a classification of the reports. As in preceding tables, the general distribution includes a small proportion of teachers that could not be readily classified as to grade taught, together with 29 teachers of ungraded schools.

TABLE VIII.—DISTRIBUTION OF TEACHERS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK."

1) GENERAL DISTRIBUTION OF 1,349 TEACHERS

Per cent of finding dif			0			N	u	m	b	e: e:	r of porti	te ng	a	c]	he	er	8										er al	ıt	0
None	 0										46																	3.	3:
" Small p											137																	.0.	
5% or les											246																	.8.	
6%-10%	 ì				 						366															i.	. 2	7.	11
11%-15%											208																	5.	
16%-20%											135									,te	 	i,					. 1	.0.	
21%-25%											73																	5.	
26%-30%											30																	2.	
31%-35%											23								٠.									1.	7(
36%-40%											20										 	, ì		٠				1.	48
11%-45%											12																		88
16%-50%											24																	1.	71
More than											.29																	2.	1
										1	349																9	9.	88

2) DISTRIBUTION OF 192 TEACHERS IN FIRST-GRADE ROOMS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK"

Proportion of pupils finding difficulty	Number of teachers reporting	Per cent of total
None	5	2.60
"Small proportion"	24	12.50
5% or less	35	18.22

6%-10%							,	0	0	0	0		9		٥		۰	۰	۰		48				۰									 							23.9
11%-15%				ı														٠	a		32	9				۰		٠							,				ı,	ı	16.6
16%-20%		ı		ı						۰									۰		19						٠	0					- 1,	 0 1				ı,	ı		9.8
21%-25%		ı		ı	ı	ı											۰		۰	۰																					5.7
26%-30%		ı										۰		۰			٠				5				۰	۰	0	9	٠	۰	٠	0.00		 		9					 2.6
31%-35%																				۰	4				۰	۰	0	۰	۰	0				 0 1		4					 2.0
36%-40%																				0	1	۰	۰	۰			۰				۰			0 1		. 4	k	ŧ.			0.5
11%-45%																				۰	2		۰			٠		a		٥				0 1		. 9					 1.1
16%-50%								٠	۰				۰			٠		٠	۰																						2.0
More than	£	60) (7/0	,					۰								٠		6	4	٠				۰		ċ	۰	٠						. 4					2.0
																					192																				99.9

3) DISTRIBUTION OF 124 TEACHERS IN SECOND-GRADE ROOMS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Proportion of pupils N finding difficulty	Tumber of repo	teachers	Per cent of total
More than 50%	"Small proportion" 5% or less 6%-10% 11%-15% 5% or less 16%-20% 21%-25% 26%-30% 31%-35% 36%-40% 41%-45%	27 40 13 27 18 6 1		7.25 . 32.26 . 21.77 . 10.48 . 32.26 . 10.48 . 4.83 . 0.88 . 1.51

4) DISTRIBUTION OF 102 TEACHERS IN THIRD-GRADE ROOMS AS TO PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK."

Proportion of pupils finding difficulty	Number of teachers reporting	1	Per cent of total
None			
"Small proportion"			3.92
5% or less			
6%-10%	28		27.45
11%-15%			20.58
16%-20%			
21%-25%			
26%-30%			4.00
31%-35%			
36%-40%			
417-45%			

46%-50% More than	50%	 							2			•									1.	96 98	
																						-	
								10	2											8	99.	95	

5) DISTRIBUTION OF 116 TEACHERS IN FOURTH-GRADE ROOMS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK"

Proportion finding di					i	ls			1	VI	11	m		r of porti		h	eı	rs										e al		(
None ''Small pr 5% or le .6%-10% 11%-15% 16%-20% 21%-25% 26%-30% 31%-35% 36%-40% 41%-45%	opo ss	·	ti	0	n		 	 	 					4 13 24 29 16 14 3 1	 	 				 	 			 	 		 	. 2	11 20 25 13 12 0 2	.4 .2 .6 .0 .7 .0 .5 .8 .5
46%-50% More than	50		ı	ı	ı	ı.	٠						 9	0 4 8 116	٠				۰	٠	٠	•	*						2	.4

6) DISTRIBUTION OF 112 TEACHERS IN FIFTH-GRADE ROOMS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK"

Proportion of finding diffic					ls			,					N	r	r		er of			cl	he	er	S					5						P	ė				a		C
None			į											Ī			2				,																			1	.7
"Small propor	ti	0	n	2			ı	Į					ļ,				5		ı									ı			ı.	į,	ı,	ı,		ı	ı,			4	4
5% or less																	22				Ĺ	į	ì	ì	ì	ì	ı	ı	ı	ì	į	ì	ı			ı	ı	ũ	1	9	.6
6%-10% .																	32																								.5
11%-15%																	25																								.3
16%-20%																	15																								.3
21%-30%																	5																					i			4
31%-35%																	-																								8
36%-40%																	$\frac{1}{2}$.7
11%-45%																	ñ																	-						-	. 0
10-1 40-15																	ő																								0
16%-50% More than 50																	3																	۰							6
more man bo	1	0		٠	٠	9 1	1	1	-	*	•	•	0	•			9	0	0			۰		٠	•	2 4			۰		٠		2	٠		٠	٠	٠		۵.	O
																-	112																						0	_	9

7) DISTRIBUTION OF 114 TEACHERS IN SIXTH-GRADE ROOMS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK"

Proportion finding di						ls							1	V	11				of			3.0	h	eı	rs]	? e			ce		C
None																			5	,						٠		 	۰						. 1					.3
"Small prop	001	ti	o	n	2							۰	0 1		á		٠		6		۰					٠				٠									5	.2
5% or les	18			0 0					۰				۰	٠	٠		٠		18		٠	۰				٠					0 1								15	.7
6%-10%			٠	٥				0		0 1				۰	0	٠	۰	- 1	35	٠	a'														. 1			. 1	30	.7
11%-15%											۰			,					16									 							0 76				14	.0
16%-20%					ì									ı					15																					.0
21%-25%			i		ı												٠.		9																					.8
26%-30%			i	i			i	i	ì				i	i	i				3	i	i	ì					ì		i	ı.						ı,			2	.6
31%-35%																			2																				1	.7
36%-40%																			0	i	ì						ì		ì			ì	ì	1		п	ı		0	.0
11%-45%																			0	i	i					ì							ì			H)	ı	Ī	0	.0
16%-50%																			3																				2	.6
More than																		-	2																				1	.7
																	-	1	14																			(99	8

8) DISTRIBUTION OF 111 TEACHERS IN SEVENTH-GRADE ROOMS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK"

Proportion of p finding difficu		Numbere	er of porti	chers		cent o
None.		 	3	 	 	 2.7
'Small proporti	on''	 	12			
5% or less			25			
			31			
			28			
000			9			
29 04 0 0 04			5			
and and.			1			4.0
31%-35%			ō			
36%-40%			0			0.0
11%-45%		 	1			4 0
16%-50%		 	0	 	 	 0.0
More than 50%	6	 	1			
		-				
			111			99.5

9) DISTRIBUTION OF 109 TEACHERS IN EIGHTH-GRADE ROOMS AS TO "PROPORTION OF PUPILS FINDING DIFFICULTY IN COMPLETING REQUIRED WORK"

Proportion of pupils finding difficulty	Number of teachers reporting	Per cent of total
None"Small proportion"	2	

5% or le	BS														19																			17.43
6%-10%									. î						36																			33.02
11%-15%			 												16											 ,								14.67
16%-20%			 												8																			7.34
																																		4.50
26%-30%																																		1.83
31%-35%		ì	ı	ı,	Ĥ			į.	ì					i	2		ì						ì								i	ĺ,	ì	1.83
36%-40%																																		
41%-45%																																		
46%-50%		i			ü	Ĭ		ŭ	ì	i			Ċ	Ĭ	1	ů	ì	Ĭ	Ĭ	ì		ů	-	ì			Ĭ.	i	Ĺ		ì			0.91
More than																																		
MINIO CHINII	00	/4	ľ	ì	•		ů	•		ï	•	•		٠.		·	i	•	ì	•	•	·	ı	•	•	•	•	•	•	•	 ï	•	ı	1.00
															109																			99.85

10) SUMMARY TABLE—MEDIAN PROPORTION OF PUPILS IN EACH GRADE REPORTED AS "FINDING DIFFICULTY IN COMPLETING REQUIRED WORK"

Grade	1	Number of teachers reporting	Median proportion of pupils reported as "finding difficulty"
		192	
* III			
IV			6%-10%
V		112	6%-10%
VI		114	6%-10%
VIII		109	6%-10%

*The variation here loses much of its apparent significance when it is observed that this is the smallest group, and that the median is much nearer 11% than 15%.

Subjects in Which Pupils Find It Difficult to Complete the Required Work. Nine hundred sixty-three teachers replied to the question, "In what subject or subjects do the pupils find it most difficult to complete the required work?" These replies are classified in Table IX. The first section of the table is of slight significance unless interpreted with reference to the detailed analysis for the various grade-groups presented in the second section.

TABLE IX.—SUBJECTS IN WHICH PUPILS FIND IT DIFFICULT TO COMPLETE THE REQUIRED WORK.

1) GENERAL DISTRIBUTION OF REPORTS FROM 963 TEACHERS

34.60%	of	teachers	reporting	name	reading
18.15%	2.2	2.2	* ,,	2.7	arithmetic
17.46%	2.1	2.9	2.2	7.7	language
17.26%			٠,	7.7	geography
13.84%	5 *	**	6.9	9.9	spelling
12.79%		**	.,	2.2	grammar
10.70%	9.9	2.7	1.7	11	history

2) "DIFFICULT" SUBJECTS IN VARIOUS GRADE-GROUPS: PRO-PORTION OF 963 TEACHERS REPORTING DIFFICULTY IN:

Grade-Group	Per cent Reading	Arith- metic	Spell- ing	Lang. & Grammar	Geogra- phy	History
1st-grade rooms 1st-&-2d-gr. rooms 2-grade rooms	70.4	29.8	10.3			
2d-&-3d-gr. rooms 3d-grade rooms 3d-&-4th gr. rooms	54.9	82.1	22.3	2.3	2.4	
4th-grade rooms 4th-&-5th-grade r'm 5th-grade rooms	s 17.7	90.2	. 12.5	10.7	25.7	6.8
5th & 6th gr. rooms 6th-grade rooms 6th-&-7th gr. rooms	2.4	87.7	16.6	7.4	44.9	19.2
7th-grade rooms 7th-&-8th-grade r'ma 8th-grade rooms	s 3.3	79.0	.6.7	52.7	26.0	31.7

The clear suggestion to be gained from the second part of Table IX is that each of the basic subjects of the elementary program has what may be called its "period of intensity," and that these periods of intensity are distributed in a fairly equitable fashion through the eight grades. This suggestion gains added strength from the data presented in Tables X and XVI, and will be referred to in a later section.

Requirements of "Home Work." Closely related to the problem of "difficult" subjects in the elementary program is the problem of "home work." Reports on requirements of "home work" were obtained from 1.535 of the 2,690 teachers replying to the questionnaire. These reports are classified in Table X; the "general distribution" includes reports from 51 teachers who could not be readily classified as to grade taught, and from 38 teachers of ungraded schools.

TABLE X.—REQUIREMENTS OF "HOME WORK" IN TOWN AND CITY GRADED ELEMENTARY SCHOOLS

1) GENERAL DISTRIBUTION OF REPORTS FROM 1535 TEACHERS REGARDING HOME WORK REQUIREMENTS.

							N	un	er c		ch	er	g		1	?e		cen otal	
\mathbf{Iome}	work re	quire	1. : .		 				 .80	2.	 						. 5	2.3	00
In	arithmetic spelling reading geography history grammar language	· · · · · · · · · · · · · · · · · · ·	• • • •	• • • •	• • •	• • •			 . 29 . 26 . 10 . 7	6. 5. 0. 5.		• •		• • •			. 2	4.1 1.6 8.1 6.1 4.0	50000
									122	5							9	9.9	29

2) "HOME WORK" REQUIREMENTS IN VARIOUS GRADE GROUPS

			Per c	ent requ	iring "h	ome work	" in:	
Grade- group	Number replying		Read- ing	Arith- metic		Lang. & gram.	Geog- raphy	His- tory
I & II	300	41.0	22.0	3.3	11.0	0.6	0.0	0.0
II & III III III & IV	255	58.2	22.2	21.7	19.0	2.7	1.1	0.0
IV & V	344	51.0	16.2	29.3	20.0	4.4	6.3	1.2
V & VI VI · VI & VII	236	36.0	11.8	34.3	25.2	7.6	8.9	1.7
VII VII & VIII	I 320	23.4	14.7	32.1	24.0	16.5	10.2	15.6

Attitude of Parents Toward Home Work. Answers to the question, "What is the attitude of parents toward home work?" were received from 1,231 teachers. These answers were distributed as follows: (the general distribution includes 53 teachers who could not be readily classified as to grade taught, together with 38 teachers of ungraded schools):

TABLE XI.—ATTITUDE OF PARENTS TOWARD "HOME WORK."

1) GENERAL DISTRIBUTION OF ANSWERS FROM 1274 TEACHERS

		favorable
,,		indifferent 8.2%

2) ATTITUDE OF PARENTS TOWARD "HOME WORK": DISTRIBUTION OF TEACHERS' ANSWERS ACCORDING TO GRADE-GROUPS

Grade-Group	Number of	Proport	ion reporting atti	tude of
	teachers answering	Favorable	parents as: Unfavorable	Indifferent
I & II	205	70.3%	21.8%	7.9%
II & III III III & IV	193	69.4%	22.3%	8.3%
IV & V	274	63.5%	28.5%	8.0%
V & VI VI VI & VII	192	69.8%	21.4%	8.8%
VII & VIII VIII	303	78.0%	16.8%	10.0%

Tendencies in Curriculum-Modification. Only 420 of the 2,690 teachers gave specific answers to the question, "In what ways have you found it necessary or advisable to modify the requirements of the course of study within the past year?" The 420 answers are summarized as follows:

TABLE XII.—SUMMARY OF 420 ANSWERS TO THE QUESTION REGARDING CURRICULUM—MODIFICATIONS

No changes found necessary Slight changes made							 		.38.5%
Course of study under revision							 		. 7.8%
Changes predominantly "additions" Changes predominantly "omissions"	of of	subjects subjects	or or	top	pics	S	 	 	12.24% 24.71%

Still fewer teachers—only 279—answered the question, "What suggestions have you made regarding the improvement or modification of the course of study?" The relative few suggestions reported are almost equally divided between "additions" and "omissions." In practically all of these cases (95 percent), the teachers report that the suggestions were given courteous consideration by those in authority.

An effort was made to determine the kind of teachers who gave this evidence of thinking constructively regarding the program of studies, and to this end the teachers reporting constructive suggestions were compared as to age, experience, and training with the entire group. It is significant that there was no correlation between these evidences of initiative on the one hand and either the age or the experience of the teachers on the other hand. In general, too, there was no correlation with training, but a curious fact was uncovered when this relationship was investigated. When it was found that the proportion of trained to untrained teachers was no greater in the group making constructive suggestions than in the entire group, a comparison was made between those who had graduated from high schools, normal schools, and colleges and those who had attended these schools but who had not graduated. In every case, the proportion of teachers who had attended but not graduated was higher in the group making constructive suggestions than in the entire group; that is, the teachers who had attended a high school but had not

graduated appeared to show significantly more "initiative" than those who had graduated from a high school; those who had attended a normal school but who had not graduated seemed to show more "initiative" than those who had graduated from a normal school; and those who had attended college but who had not graduated similarly seemed to show more "initiative" than those who had graduated from college. The total number in the group making suggestions (279) is so small that this apparently paradoxical relationship is probably a mere accident. It suggests, however, a possibility that might repay further investigation. Does the very fact of "graduation"—of "completing a course" breed a mental attitude that tempts one to mental indolence or that is inimical to initiative? Does the diploma or the degree "function" as the period "functions" at the close of a sentence?

Modifications Suggested by Teachers. Typical suggestions made by teachers for the improvement of the program of studies are indicated in the following lists; suggestions made by more than one teacher are italicized:

GRADE I:

More field work.

Clay work needed.

Calisthenics should be introduced.

More time should be given to handwork.

More time should be given to number work.

Emphasis should be placed upon morals and manners.

Bible study should be introduced.

More attention to nature study.

Emphasize games.

Emphasize penmanship.

Have less writing at the seats.

Give less attention to arithmetic.

Give less time to reading.

Less emphasis upon the dollhouse in manual training.

Less time to physiology lessons.

Less time to drawing.

Less attention to handwork.

GRADE II:

Have more arithmetic "in Grade I."

More arithmetic.

More construction work.

Bible study should be added.

Morals and manners should be emphasized.

Nature study should be emphasized.

Introduce history or geography.

Emphasize language work.

Less emphasis upon the art work.

Less emphasis upon arithmetic.

No geography.

GRADE III:

Add geography of State.

Emphasize home geography.

More handwork.

More nature study.

More picture study.

Less nature study.

Omit such topics in arithmetic as area, perimeter, square and cubical measurements.

Omit spelling as a subject.

Omit geography.

Combine nature study and geography.

Omit fractions in Grade III.

Less arithmetic in Grade III.

Omit division in arithmetic.

GRADE IV:

Add physiology.

Add swimming.

Emphasize geography.

Introduce dramatization.

Introduce dancing.

Introduce manual training.

Introduce domestic science.

Emphasize reading.

Emphasize morals.

Less emphasis upon geography.

Less emphasis upon fractions; omit long divisions; omit decimals; less emphasis upon measurements; omit percent-

age; omit cubic measurements.

Less emphasis upon drawing.

Less emphasis upon handwork.

Less emphasis upon history.

Less time to music. Omit formal grammar.

GRADE V:

More arithmetic.
Introduce civics.

More emphasis upon geography.

Emphasize gymnastics; folk-dancing.

More nature study.

Emphasize history.

More manual training.

More geography. . Introduce agriculture.

Omit basketry.

Omit "geography of summer resorts."

Omit Roman history.

Omit nature study.

Less emphasis upon drawing.

Less emphasis upon music. Less emphasis upon fractions.

GRADE VI:

More attention to writing.

More time for manual training.

More time for domestic science.

Emphasize physiology.

More nature study.

More history.

Omit the geometrical topics in arithmetic; omit longitude and time, circle measure, greatest common divisor; omit percentage.

Program too crowded for cooking and manual training.

Less emphasis upon drawing.

Less emphasis upon physiology.

Less music.

Omit history of Illinois.

Modify history, reducing time given to wars.

GRADE VII:

Add sex-hygiene.

Emphasize nature study.

Emphasize arithmetic.

More time for manual training.

More time for domestic science.

Introduce agriculture.

Emphasize morals and manners.

Omit cube-root, plastering, papering, metric system, many topics in arithmetic.

Omit clause construction in grammar; omit topics in grammar: omit technical grammar.

Less emphasis upon physiology.

Less emphasis upon geography.

Less emphasis upon history.

GRADE VIII:

More drill in arithmetic.

Add algebra.

Add ethics.

Add social hygiene.

Add agriculture.

More emphasis upon geography.

Emphasize music.

More time for manual training.

More time for domestic science.

Introduce vocational training.

Emphasize sewing.

Emphasize physiology.

Omit nature study.

Omit discount, partial payments, metric system, square and cube root, stocks and bonds, English money; omit arithmetic if well done prior to eighth grade.

Omit spelling if well done prior to eighth grade.

Complete geography in Grade VII.

Omit civics.

Less emphasis upon grammar; omit subjunctive mode in grammar.

Emphasize spelling common words.

Omit folk-dancing.

Modifications Suggested by Parents. The following suggestions are reported by teachers of the various grades as having been made by parents: GRADE T:

Parents desire parents-teachers' associations. More nature study.

Greater emphasis upon the "three R's."

Fewer fads.

More handwork.

Playground improvement.

GRADE II:

School entertainments desired.

Manual training.

Nature study.

Field trips.

Parents will coöperate.

GRADE III:

Eliminate games in teaching of arithmetic.

Teach fundamentals.

More work on arithmetical tables wanted.

Basketry wanted.

Parents anxious to coöperate.

More practical work in arithmetic.

Mothers' Club meetings.

GRADES IV AND V: No suggestions.

GRADE VI: Eliminate painting and drawing.

Have nine years in grades, and shorten the year.

No sewing for boys.

Add cooking.

Omit "some history."

Have field trips.

Introduce junior high school.

More Parent-Teachers' Association meetings.

Parents anxious to coöperate.

GRADE VII:

Parent-Teachers' Associations wanted.

More practical work in arithmetic.

More practical work in language.

More home work.

Manual training desired.

Sewing desired.

GRADE VIII:

Omit music.

Emphasize spelling.

Eliminate some work; make the rest more thorough.

More attention to "three R's."

Cut out "fads."

Introduce applied arts.

Field trips desired.

Enlarge manual-training department.

Provide an "all-'round development." .

Parent-Teachers' associations desired.

Adaptation of Work to "Bright," "Dull," "Retarded" and Abnormal Pupils. Of the 2,690 teachers reporting, 841 state specifically that an effort is made to meet the needs of the brighter pupils. The specific steps that are taken toward this end fall readily under one or the other of two general procedures, (1) providing more work for these pupils, and (2) encouraging rapid promotion. Each of these procedures is represented by approximately fifty per cent of the 841 answers.

The provisions for the "dull" pupils are more numerous, and are represented by the following summary

of replies from 832 teachers:

TABLE XIII.—PROVISIONS FOR "DULL" PUPILS: SUMMARY OF ANSWERS FROM 832 TEACHERS.

Reduction in amount of work required	25.5%
Special provisions for extra "drill"	
Help outside of regular school hours	
Individual help as needed during school hours	7.4%
Individual attention by a special teacher	
General requirement of "more time" for "dull" pupils	6.6%

Many if not most of the "dull" pupils are included in the "retarded" group, but a separate question inquired as to the general policy of dealing with retarded pupils, and this question was answered by 422 teachers.

TABLE XIV.—POLICY IN DEALING WITH "RETARDED" PUPILS: SUMMARY OF REPLIES FROM 422 TEACHERS

Extra work demanded	
Leniency in promotion	46.4%
Provision made for individual attention	
Provision made for special instruction	

With regard to "leniency in promotion," it is worthy of note that the proportion of teachers who admit this policy in dealing with retarded pupils is significantly higher in the seventh and eighth grades than in the lower grades.

Policies regarding the treatment of "abnormal" pupils are reported by 328 teachers; the replies indicate that most of these teachers are serving in schools where special administrative provisions, in the way of special teachers, special rooms, or special schools, have been made for abnormal children.

Gradation and Promotion. Semi-annual promotions are the rule in the town and city elementary schools represented in this study; 68 percent of 2,009 teachers furnishing data relating to promotion report the semi-annual plan, as against 29.4 percent who report the annual plan, 2.2 percent who report three promotions each year, and less than 1 percent who report quarterly promotions. Promotions at irregular intervals are reported by 1.6 percent of these teachers.

Bases of Promotion. The replies to the questions relating to promotion from grade to grade reveal a wide variation in policies and practices as to bases of promotion. Among the factors that are mentioned as determining promotion are "Ability of pupils," "Age of pupils," "Regularity of attendance," "Knowledge of work covered in the grade," "Effort that pupils have made to complete the work," and "Health of pupils." "Knowledge of work covered" and "Ability of pupils" are naturally mentioned most frequently. The measurement of knowledge and ability, however, is not a simple matter, and it is here particularly that the variations are numerous and striking. The three "measures" most commonly employed are "final examinations," "record of daily work," and "teacher's judgment of pupils" ability.,,

The variations in the requirement of final examinations as bases for promotion are shown in the following tables:

TABLE XV.—REQUIREMENT OF FINAL EXAMINATIONS: SUMMARY OF REPLIES FROM 1350 TEACHERS

Grade- group	Number of teachers replying	Proportion reporting requirement of final examination
I & II	254	37.7%
II & III III III & IV	227	66.9%
IV & V	346 .	73.8%
V & VI VI VI & VII	214	76.0%
VII & VIII	301	75.4%

Final examinations, however, even when reported as being "required," are seldom required in all subjects. In general, the requirement is limited to the subject or subjects that are particularly significant in the grade in question. What might be termed the "curve of examination-requirements" follows the same general course as the "curve of difficulty" (see Table IX), and the "curve of home-work requirements" (see Table X). The following table clearly indicates this tendency.

The Relative "Intensity" of the Various Subjects in the Different Grade-Groups. The general correspondence among the data of Tables IX, X, and XVI suggested the possibility of combining these data in a way that would give comparable indices of "intensity" for the various subjects. For each grade-group and for each subject, the per cents appearing in the three tables were added, and each sum was then proportioned to the largest sum, which was given the arbitrary value of 100 as representing the highest "intensity." Thus arithmetic reaches its highest intensity in Grade-group d (V & VI. VI. VI. & VII), and inasmuch as this is also the highest

TABLE XVI-REQUIREMENT OF FINAL EXAMINATIONS: SUBJECTS IN WHICH EXAMINA-TIONS ARE REQUIRED

				67		
	arosidus IIA	8.4%	8.6%	18.0%	34.0%	16.3%
on in:	K Totai H	2.4%	0.7%	14.9%	31.5%	60.3% 16.3%
aminatic	Geography	3.6%	23.0%	47.0% 14.9% 18.0%	67.9% 31.5% 24.0%	40.0%
final ex	Grammar	0.0	2.6%	41.6% 58.8% 11.7%	48.1% 50.6% 18.5%	38.6% 12.9% 53.8%
of	9gaugnad.	2%	9/09	8%	9/99	96
nent		25	. 56.	50	50.	12.
quiren	Spelling	26.4% 25.2%	70.4% 56.6%	41.6%	48.1%	38.6%
Proportion of teachers reporting requirement of final examination in:	Reading	90.4%	53.3%	25.9%	21.0%	17.2%
ers repo	Arithmetic	2.4% 70.8%	79.6%	2.7% 60.2%	75.9%	70.3%
fteach	Vature study		0.0		0.0	0.0
rtion of	Physiology	2.4%	1.3%	4.3%	7.4%	7.5%
Propo	Z nitirW	3.6%	2.6%	1.2%	0.6%	1.8%
	DisuM	0.0	3.3%	3.1%	5.5%	5.8%
	No. of replies	80	152	255	162	227
	quorg-9bart)	I & II	III & III III III & IV	IV & VI	V & VI VI VI & VII	VII & VIII

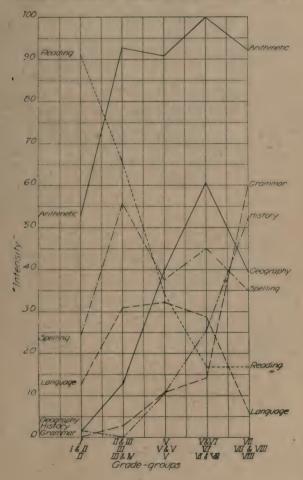
"intensity" reached by any of the seven basic subjects of the elementary program, it becomes a serviceable standard against which to measure the intensity of arithmetic in other grade-groups and the intensity of other subjects. The accompanying chart reveals these variations in intensity, indicates the grade-groups in which the apex of intensity is reached in each subject, and shows the relative intensity of each subject as compared with each of the others in each of the five grade-

The intensity-values represented in graphs are based upon a combination of three factors: (a) percent of pupils reported as finding difficulty in completing required work in each of the subjects; (b) percent of teachers reporting requirements of home-work in each of the subjects; and (c) percent of teachers requiring final examinations in each of the subjects. There are, of course, other "measures" of "intensity," the most obvious of which is the proportion of pupils failing in each of the subjects in each of the grade-groups. Data touching upon this problem were not obtained through our questionnaires, but it is interesting to note that comparable data presented in the report¹ of the Cleveland school survey show a close resemblance to our determinations. In both cases, arithmetic is the most "intense" subject, and in both cases the intensity of arithmetic is sustained

¹From C. H. Judd: *Measuring the Work of the Public Schools*, Cleveland Education Survey, 1915. The following table (p. 29) presents the data referred to: Percent of total number of failures in each grade in each subject.

Subject					Grade			
	I	II	III	IV	v	VI	VII	VIII
Arithmetic		22	60	47	42	35	29	28
Reading		64	27	16	8	5	3	3
Spelling			7	11	7	- 5	3	4
Language			6	21	23	20	14	٠.
Geography				• 6	23	27	12	10
Grammar						11	29	33
History							27	23

CHART SHOWING RELATIVE INTENSITY OF EACH OF THE SEVEN BASIC SUBJECTS IN EACH OF THE GRADE GROUPS.



from the second grade through the eighth grade. In Cleveland, the apex of intensity for arithmetic comes in the third grade; in our determinations, a significantly high point is reached in the grade-group including the third grade, but a more pronounced apex is found in the fifth and sixth grades. Reading, geography, language, grammar, and history follow precisely the same order in both cases, and the curves of intensity for spelling, while not so strikingly similar, are not at all inconsistent with one another.

Subjects Disregarded in Considering Promotions. The seven basic subjects referred to above constitute the "core" of the elementary program. Subjects not in this list are reported occasionally by teachers as causing difficulty, or as involving requirements of home-work or of final examinations, but in no case is the proportion of such reports at all significant. The following table shows the tendency to disregard all subjects except these seven basic subjects in determining promotion.

TABLE XVII—SUBJECTS DISREGARDED IN DETERMINING PROMOTION

Subject														P	ro		epo	on of 1407 Teacher orting subject as disregarded
Music			 		 							 						67.3%
Drawing .			 			 	Ü				ı		ä	 1		, ,		65.4%
																		31.4%
Physiology																		10.2%
Manual tra	ainir	12				 			 	٠.			ì		i			9.1%
Physical tr																		9.1%
pelling .			Ĭ.,					n	 i		Ĭ.		ì		ì			8.1%
rithmetic	300	۱		ш					ü		i	i.	Ĭ	ı	i			2.8%
																		2.8%
listory																		2.7%
anguage																		2.0%
eography																		1.9%
																		0.5%

The seven basic subjects are included in the table merely for the sake of emphasizing the fact that, with the exception of spelling, no one of these is disregarded in an appreciable measure, while such subjects as music, drawing, writing, physiology and hygiene, manual training, and physical training have, as compared with the basic subjects, relatively little significance in determin-

ing progress from grade to grade.

Field Trips and the Use of Environmental Materials. Only a small proportion of the teachers reporting apparently make use of the educative materials of the immediate environment in so far at least as the use of such materials involves the "school excursion." To the question, "What is the attitude of your community toward taking pupils on excursions to study neighboring industries, geographical features, or other objects of interest," 1,284 replies were received distributed as follows:

TABLE XVIII—ATTITUDE OF COMMUNITY TOWARD SCHOOL EXCURSIONS

		-			C									-			_										
Favorable .				 													 		 		 			. 69	9.9	99	0
Unfavorable		٠	٠	 . ,	٠			٠				. 9			٠		 		 	٠	 		٠	. 2	1.8	39	6
Indifferent .			 ,	0			0 1	×	۰	٠	٠	٠.			۰	 	 		 	٠	 	٠		. !	8.8	30	c

But only 798 teachers answered the question, "How many trips of this kind do you make with your pupils each year?" and of these nearly one half state that no trips are made. One or two trips each year are reported by 36 percent of the 798 teachers; three or four trips by 11 percent; more than four trips by 6 percent.

"Opening Exercises." Reports on the character of opening exercises were obtained from 1,771 teachers. The amount of time devoted to these general exercises is

shown in Table XIX:

TABLE XIX—AMOUNT OF TIME DEVOTED TO OPENING EXERCISES EACH DAY

,	Fime																	-						Proportion of 1771 teachers replying
5	minutes				10				,			 			 				 					25.1%
10	minutes		۰				۰						۰	 		۰						 ,		45.1%
20	minutes	٠			٠	٠	٠		×	۰		 		,	 			4	 					27.5%
30	minutes	٠							٠		5	 			 		 ı,	ı,			ř			2.3%

There is no significant variation among the gradegroups in respect of the amount of time spent in opening exercises.

The character of the exercises naturally varies not only from teacher to teacher and from grade to grade, but with individual teachers from time to time. The following table of frequencies with which different types of exercises are mentioned is, however, suggestive:

TABLE XX-CHARACTER OF OPENING EXERCISES

Proportion	of	1	77	1	te	ac	h	er	S	re	po	rt	in	9	ex	er	ci	se	S	as	c	01	mj	or	is	ir	ng	::
Songs																		·.					٠.					. 69.5
Poems				٠.															į.							ì		.27.7
Other readings																						٤.						.27.5
alks														٠.	. 3							٠.						.23.3
Devotional exerci	ses	٠		9. 4											٠.													.18.9
urrent events .										٠.	٠																	16.1
tories	-		• 4	٠,		• •		p /R							. 1			٠					٠		•	0		. 15.4
lature study	6 .	٠.		٠			٠.	J. I			٠		٠.	1				٠.	٠				. '		۰	٠		. 4.5
Moral lessons			2 .			٠				٠.	-0	٠.		* *	٠.	٠.		٠,	٠		٠.		۰		۰	• '		. 4.0
Patriotism'				٠.		٠.	•		٠.	٠.	9.11			٠,			٠		٠,	2 .					۰	٠,	2.1	. 2.0
lames				٠		•		* 1	٠.	* .*	٠	٠.		•		• •			۰						۰			. 0.0

Stories and nature study are most frequently reported by teachers in the lower grades; current events by teachers in the upper grades; otherwise the distribution is fairly uniform throughout the grade-groups.

Time Spent by Teachers in Preparing for School Work Outside of School Hours. In reply to the question, "How many hours a week do you spend on the average in preparing outside of school hours for school work?" answers were received from 1,593 teachers. The distribution of replies is given in Table XXI.

TABLE XXI—HOURS EACH WEEK DEVOTED TO OUTSIDE PREPARATION FOR SCHOOL WORK

	Proportion	of	1598	teachers	reporting:		
hour a week							3.64%
hours a week							7.41%
hours a week							6.47%
hours a week		4	,.				6.47%
hours a week	*****					2	0.12%
hours a week.							0.50%
to 10 hours a w	eek					2	9.31%
fore than 15 hours a	re a wook						2 22 0

It is significant that the longest periods of outside preparation are reported most frequently by the teachers in the first, seventh, and eighth grades, the majority of whom report more than seven hours' outside preparation each week. These teachers are also significantly older and significantly more experienced than the teachers in the other grade-groups. The shorter periods of outside preparation are most frequently reported by teachers in grade-groups b and c,—the lower-intermediate teachers who are in general the youngest and the least experienced.

SUMMARY OF DATA PRESENTED IN PART IV; INFERENCES AND INTERPRETATIONS.

1. From six to ten percent of the pupils enrolled in the elementary schools of the towns and cities represented in this study may be expected to find difficulty in completing the work prescribed. This proportion is practically constant as the median proportion throughout the eight grades.

2. The subjects in which the greatest difficulty is experienced vary from grade to grade. In general, arithmetic may be looked upon as the most difficult subject as measured by the standard represented in Table IX, and the difficulty of this subject is sustained throughout the grades from the third to the eighth.

3. Requirements of home-work are made by slightly more than 50 percent of all teachers furnishing data on this matter. In general, home-work is required in Grades I, II, V, VI, VII, and VIII more frequently than in the lower-intermediate grades. It is required most frequently in Grades VII and VIII. It is significant that the teachers in the grades where home-work is frequently required are in general older and more experienced than the teachers in the grades where home-work is less frequently required.

4. Home-work is most frequently required in the following subjects and in frequencies represented by the order in which the subjects are named: arithmetic, spelling, reading, geography, history, grammar, and language. In no subject other than these is home-work re-

quired in an appreciable measure.

5. The attitude of parents toward home-work is reported by 70 percent of the teachers as being "favorable," by 21.5 percent as being "unfavorable," and by 8.2 percent as being "indifferent." The highest frequency of reports as "unfavorable" (28.5 percent) is found in the replies of teachers of the fourth and fifth grades. The lowest frequency (16.8 percent) is found in the replies of teachers of the seventh and eighth grades.

6. The changes in the prescribed curriculum that were found necessary or advisable in the year of the investigation (1914) were predominantly in the nature of omissions. Very few teachers apparently made sugestions as to the improvement of the prescribed course of study, but when these suggestions were made they were almost always well received by those in authority. There seemed to be no correlation between the "initiative" of teachers as evidenced by their willingness to make suggestions, and their age or experience. There is a suggestion (see under Table XII) that training in the sense of "graduation" from a school or college may sometimes be inimical to initiative.

7. The adaptation of work to the needs of "bright" pupils is accomplished chiefly through either adding to the requirements or encouraging rapid promotion from grade to grade (grade-"skipping"). The adaptation of work to "dull," "retarded," and "abnormal" pupils involves a larger number of policies and practices. (See

Tables XIII and XIV.)

8. Semi-annual promotions are the rule in the schools represented by 68 percent of 2,009 teachers re-

porting; annual promotions in the schools represented by 29.4 percent; and three promotions each year in the

schools represented by 2.2 percent.

9. Final examinations form one basis of promotion with approximately three fourths of the teachers reporting from the fifth to the eighth grades inclusive; with approximately two thirds of the teachers reporting from Grades III and IV; and with approximately three-cighths of the teachers reporting from Grades I and II.

10. Final examinations, however, are not commonly required in all subjects; where required, they are most frequently limited to the seven basic subjects, or to the subjects among these that are represented in the program of the grade in question. In general, the "examination-requirements" curve follows the "difficulty"

curve and the "home-work-requirements" curve.

11. By combining the data in Tables IX, X, and XVI, indices of "intensity" were computed for each of the subjects and each of the grade-groups. Graphs of "intensity" constructed for the various grade-groups show: (1) that arithmetic, while of high intensity from Grades III to VIII, inclusive, reaches an apex of intensity in Grade III and a still higher apex of intensity in Grades V and VI: (b) that reading reaches its apex of intensity in Grades I and II and sharply declines after Grades III and IV have been passed; (c) that spelling reaches its chief apex of intensity in Grade III and another lower apex in Grades V and VI; (d) that geography reaches its highest intensity in Grades V and VI; (d) that language (as distinct from grammar) is most intense in Grades IV and V; (e) that grammar does not assume significance until Grade VII is reached, but that it rises to a high point of intensity in Grades VII and VIII; and (f) that history begins to assume significance in Grades V and VI, but reaches its high point in Grades VII and VIII.

12. Certain subjects, especially music, drawing,

physiology and hygiene, and writing are not frequently considered in determining promotions from grade to grade, nor are they reported with appreciable frequency as giving rise to difficulties. In general, the "newer" subjects do not appear to play nearly so significant a rôle in the elementary program as do the older "basic" subjects, and the significance of the older subjects, in so far as this was in any way measured by the data presented above, seems to be fairly well correlated with the order in which these subjects were introduced historically as ingredient materials of elementary education.

13. Teachers in the elementary schools apparently make but slight use of the materials of the immediate environment in so far at least as the use of these materials would involve "school excursions." From the replies of the teachers, however, it would seem that at least 70 percent of the communities represented would not look with

disfavor upon school excursions.

14. Opening exercises appear to be general in the schools represented in this study. The median period of time devoted to these exercises is 10 minutes; the exercises comprise chiefly (in the order named): songs, poems, other readings, talks by the teacher, prayers and other devotional exercises, current events, and story-telling.

15. The median amount of time spent each week by 1,593 teachers in outside preparation for school work is approximately six hours. In general, the teachers of Grades I, VII, and VIII spend longer periods than the median, and teachers of the lower-intermediate grades spend shorter periods than the median; in general, too, the teachers in the former group are the older and the more experienced, while the teachers in the latter group are the more immature and the more inexperienced.

THE TECHNIQUE OF SUPERINTENDENCE.

L. D. Coffman

 His visits. Frequency. Conferences. Items noted, nature of visits. Preparation for visits. Suggestions for improvement.

II. Teachers Meetings. Frequency; length; time; direction of; preparation for; nature of; topics,

attendance, pay.

III. Direction of professional reading. What book lists, magazine lists? How secured? Reports, incentives; How utilized?

IV. Testing efficiency of instruction. Scales and tests used. How often? With what general

results?

V. Course of Study. Kind of course, revisions. Outlines of subject matter. Methods, time allotments, latitudes, supervisory oversight, promotions.

VI. Rating of teachers. Purpose. Items.

VII. Rating recitations. Teacher's attitude, routine, discipline, questioning, criticism of replies, drills, assignments.

INTRODUCTION

This study of the Technique of Superintendence constitutes a part of the Illinois School Survey made under the auspices of the Illinois State Teachers' Association.

Purpose. (1) The Purpose of the study is to determine the actual details of the superintending process or method; (2) to determine whether there are any norms in the method which are recognized by all superintend-

ents, and the extent to which these norms are observed; (3) to indicate or point out commendable practices and to recommend the wider following of such practices.

Method. A questionnaire was sent to the various superintendents of the state requesting information on several of the most obvious fields of activity of the average superintendent. This questionnaire was so framed as to suggest in outline, what might be considered an approach to ideals of activity in each of the following several fields.

The superintendent's visits to class rooms. 1.

Teachers' meetings.

Supervision of professional reading.

- Use of printed or mimeographed bulletins.
- Testing for efficiency by use of standard tests and
- The making and the supervision of the course of 6. study.
- The rating of teachers.

The rating of recitations.

The above questionnaire was mailed about January 15th, 1915, to every superintendent or principal of schools in the state, where six or more teachers are employed.

Five hundred blanks were sent out. Of these 99 were returned, filled out with a greater or less degree

of fullness

SUPERINTENDENTS' VISITS

Question 1 relates to the program of visits and to the frequency of visits. Table I is a summary of the answers to this question.

TABLE I.

Question 1. Daily program of visits: Number of Superintendents reporting. 32 Weekly program of visits: Number of Superintendents reporting 37 Visit rooms in order: Number of Superintendents reporting. 34 Visit buildings in order: Number of Superintendents reporting. 28

Preparation made for visits: Number of Superintendents reporting	57
Teachers required to have outline for day or week	
Visits planned by subjects outline for day or week, reporting.	
Visits planned by grades	
Av. No. visits per teacher per month last year	5
Supt. visiting all teachers more than 3 times last year	72

It will be noted that about two thirds of the superintendents have a daily or weekly plan of visitation, and that about the same proportion visit the rooms or buildings in order. More than a third of them plan their visits so as to observe work in certain subjects and nearly half of them plan their visits according to the grades to be observed. The merits and limitations of these various items of visitation are well known and need not be dis-The returns indicate an attempt on the cussed here. part of superintendents to plan for this part of their work and to go about the accomplishment of it in a more or less systematic order. The number of visits per teacher per month was five and three superintendents out of four visited each teacher more than three times last year. This is not a bad showing when the great variety of administrative duties of the average superintendent are considered.

Mere visitation is of little value unless followed up in some way by the right kind of conferences. Memoranda of points observed should be kept on which to base subsequent discussions with teachers. Table II shows the prevalence and nature of the "follow-up" work of superintendents.

TABLE II.

Supts.	keeping	mem	orandum	of visits	:			7
							ntendents	
Follow	up visi	ts by	written	statement	8:	Number s	uperintendents	3
Follow	up visi	ts by	blank fo	orms check	ced,	superinte	ndents	
							superintendents	
Follow	up visi	ts by	specific	reference	in	meetings,	superintendents	55

Nearly three-fourths of the superintendents keep memoranda of visits and practically all of them follow up their observations with some kind of conference. "Personal Talks" seems to be the usual kind of conference while the "Checking of blank forms" to be left with the teacher finds little favor with Illinois superintendents.

The phases of classroom work observed during visits and the emphasis placed on each are indicated in Table III. The character of instruction seems to receive most attention.

TABLE III.

Discipline emphasized in visits:	Number of superintendents	67
General management emphasized	in visits: Number of superintendents.	63
Character of instruction visits:	Number of superintendents	87

How the supervisor occupies himself during his visit is a matter of some importance. The most common occupations of superintendents during visitation are tabulated below.

TABLE IV.

	-
Remain perfectly quiet during visits: Number of superintendents	44
Take notes during visits: Number of superintendents	
Assist in recitations during visits: Number of superintendents	
Write observations during visits: Number of superintendents	
Commend teacher's methods during visits: Number of superintendents.	
Criticise teacher's methods during visits: Number of superintendents	0

It was shown in Table I that more than half of the superintendents planned their visits but fewer than that make definite preparation for such visits. Table V shows the nature of the preparation made and the number of superintendents making each.

TABLE V.

	How superintendents make preparation for visiting rooms.
1.	No preparation
2.	"Study teachers' programs", or plan book
3.	"Study lesson to be heard"
4.	"Refer to course of study where teacher should be working" 7
5.	"Decide what points to look for"
6.	"Reading and preparation of devices" 5
	"Study or outline needs and weaknesses of individual teachers". 5
	"Refer to records of past visits" 4
	"Prepare a story for the children"
	"Have something new for the teacher's weak points" 1

The kind of preparation which seeks merely to locate the work of a particular classroom in the text, course of study, plan-book or daily program can hardly be regarded as helpful preparation, yet 36 superintendents admitted making this kind of preparation only. This number combined with those making no preparation increases the number to 77 or more than three out of four who make practically no preparation.

In answer to the query, "How do you think your visits might be improved?" 65 superintendents sent in suggestions. These have been grouped as follows:

"More time" was stated by	ı
"More often" was stated by	
"Longer visits" was stated by	
"Better preparation" was stated by 9	
"More system" was stated by 4	ı

TEACHERS MEETINGS.

One important duty of the superintendent is to provide for and to conduct teachers' meetings, and other conferences. The frequency, length, time, kind, programs, attendance at these and pay for them become matters of importance to the superintendent. Ninety-four superintendents answered that teachers' meetings were held at the school building. A summary of the number, length, and frequency of meetings is given in Table VI.

TABLE VI.

	annual nur																	
Average	per month			 ٠.		٠		ï	0	 	, ,		٠				. 1	
Length-	maximum									 							.180	minute
	average .		 			۰				 				 			. 56	2.7
	minimum		 		 												. 15	9.0

The time of these meetings is summarized below:

TABLE VII.

Day of week	Monday	
	Tuesday	
	Wednesday	
	Thursday	
	Friday	

The hour was usually four o'clock.

Preliminary and follow-up activities of both teachers and superintendent have direct bearing on the effectiveness of the meeting. These activities for Illinois teachers' meetings are tabulated below:

TABLE VIII.

	,	Superintendents replying
Preparation required or expected Meetings planned by Principal or Superior		
Meetings planned by Committee		17
Meetings outlined in bulletin in advance. Meetings outlined in bulletin afterward.		

Other than general meetings were held by sixty-one superintendents. The teachers were grouped as follows in these meetings:

TABLE IX.

			 	 ~~~	 	ARTES	 -				-	-	_	_	-			_		-								
Ву	grades .									, ,												 	ı	Į.			47	
By	sexes		 									٠	٠			٠	,		ı,	٠	÷	 ×			٠	٠	1	
Ву	subjects	٠	 																					٠	٠	٠	18	
By	buildings	8	 				٠	6.				٠	٠			٠	٠			٠	۰				۰	۰	27	

The general nature of these meetings is shown by the following table giving the number of meetings held last year of each character.

TABLE X.

				Meetings
Reading	circle	books		338
Other as	signme	nts		205
Lectures	or tal	ks by	Superintendent	120
Lectures	or tal	ks by	outsiders	24

The above figures indicate the importance of readings as a basis for teachers' meetings.

Some of the topics considered in these meetings are given below:

TABLE XI.

																	eetings
Classroom instruction																	
Discipline																	
Sanitation and hygien	le.				 ۰		. 0			۰		٠			 		.145
School organization .																	
Playground supervisi																	
Community activities													 				.107
General culture																	
Promotions																	
Personal habits of te	8 C	h	er	g,		. '				٠		٠	 		 		 . 83
Teachers' pensions									 1			٠	 				. 43
Salary schedule						٠				٠			 				. 32

Specific evidence is given that the teachers' meetings have good effects upon the teachers and upon the school. It is of value to have the evidence in regard to the variety of the work done. The following are the most important results as noted in the reports.

- More refined teachers.
- Better attitude of teachers toward their work.

  Attitude of teachers toward community bettered.

  Educational and moral standing of the school improved.

  Better organization and better sanitation.

  Improvement in the use of the playground.

- Larger number of promotions.
- Teachers understand the minimum requirements.
  - Better discipline.
- Increased enthusiasm on the part of the teachers.

Of the ninety-eight schools reporting ninety-three or ninety-seven per cent encouraged their teachers to attend meetings in other towns. The meetings attended were:

		Ву	teachers	$\mathbf{B}\mathbf{y}$	Supts.
1.	State Teachers Association		. 31 schools		44
2.	Sectional meetings		. 39		51
3.	Teachers Institutes				33
4.	National Educational Association		. 1		8
5.	High School Conference		. 23		45
	District Teachers M. etings				6

The number of schools in which the expenses of teachers were paid in full or in part, and the number of schools in which the teachers received their regular salaries for the time spent at teachers meetings is reported as follows:

Expenses	paid in	n full				 	 1
Expenses							
Regular	salaries	received	for	time	spent	 	 82

## DIRECTION OF PROFESSIONAL READING.

Another duty of the superintendent is to secure an improvement of teaching by supervising the professional reading of his teachers. The survey reports show that twenty-seven of the ninety-eight superintendents reporting did not direct such reading. Forty-eight of them prescribe the State Reading Circle books and twenty-three of them prescribed other books. Fifty-eight superintendents allowed their teachers to choose books from an optional list, while forty offered no choice or required no reading. Reports on the books read were required by sixty-four superintendents, not required by thirty-four.

Although over three-fourths of the superintendents required certain books read, only about half of them made provisions for a teachers' professional library. The following table indicates the methods of providing for reading matter for teachers:

#### TABLE XII.

											ities
Books	bought	by	teachers	individually.	 			٠.		. "	 51
2.2	,,_	2.7	2.2	collectively.	 			<i>-</i> .			 25
2.7	11 .	2.7	board a	appropriations	 	 			v-		 15

Library	maintained	by	board 2	29
,,	11	2.7	assessing teachers	2
2.2	1.7	7 7		7
** .	"	P 2	entertainments	8

The above figures show that the burden of providing professional reading matter is not assumed by the superintendent or board, but by the teachers themselves. However in thirty schools the library was kept in the superintendent's office, while in seven cities the public library cared for the books. In no case was there any traveling library provided. Twenty-seven reported that the library was used "slightly" while only five reported that it was used "much." Eighteen superintendents kept account of what books and magazines were read and by whom they were read. The following lists of books were either prescribed or suggested by superintendents.

#### Prescribed

Reading Circle books (Rural Economics) Classroom Management, Bagley Classroom Management, Bagiey How to Study, McMurry Method of Recitation, McMurry Human Behavior, Bagley, Colvin Dynamics of Education, O'Shea Mind in Making, Swift Principles of Education, Jones High School Administration, John-High School Age, King Everyday Ethics
The Educational Process, Bagley How Pupils Study, Earhart The Recitation, Betts History of Education, Monroe History of Education, Davidson Civics and Health Elem. School Standards. McMurry Education and the Larger Life. Henderson Everyday Problems, O'Shea Teaching of Geography, Sutherland

## Suggested

Classroom Management, Bagley Modern High School, Johnston Springfield Survey
Betts, Recitation
School Efficiency Series
All the Children of all the People, High School Education History of Education, Monroe Education in a Democracy, Hol-Teachers College Record The Boy and His Gang High School Management, McMur-Defective Children, Goddard Problems in Vocational Education Teaching Primary Arithmetic Personality of Teacher, McKinney Psychology, James Vocational Guidance, Davis Basis of Practical Teaching, Bryan Administration, Snedden Social Conscience, Coffin N.E.A. Proceedings

In fifty-seven cities the superintendents recommended the reading of certain magazines and twenty-six of them provided these magazines in teachers' libraries, while thirteen others personally contributed these magazines to libraries. Certain monographs were also recommended and definite uses specified for each. The following lists indicate the magazines most widely read:

## PROFESSIONAL MAGAZINES LISTED.

Times	Times
Name Mentioned	Name Times Mentioned
School News	Normal Instructor
School and Home Education 27	Elementary Teacher 9
School Review	Education 7
Primary Plans20	Natl. Geog. Magazine 7
Primary Education	Elementary School. Jr 6
School Century 7	Journal of Education 6
School Board Journal 7	Arts Magazine 5
Illinois Teacher 8	Primary Teacher 4
Independent 4	Educational Review 4
Educational Foundations 4	Popular Educator 4
Western Teacher 3	Manual Training Magazine 4
Current Events 3	Teachers Col. Rec 3
History Teacher's Magazine 3	Worlds Work 3
Sch. Science and Math 3	Journal of Geog 3
Popular Mechanics 2	Outlook 2
Review of Reviews 2	Educator Journal 2
The English Journal 2	Psych. Clynic 1
Weeks Current 1	Scientific American 1
Atlantic Monthly 1	School Journal 1
Primary School 1	Teachers Magazine 1
New York School Journal 1	American Penman 1
Eastern Penman 1	Literary Digest 5

The incentives provided by the superintendent to stimulate professional reading are worthy of classification. Table VII. gives this classification:

## TABLE XIII.

																5	Supts.
Basis for																	
Profession																	
Basis for	salary	incres	se			 							 		ı		. 6
Reading re	equired:																2
No incenti	ves pro	vided			 Ĭ.			i	 ũ	 ũ	ì	i.		i	ì	Ш	38

The information obtained by teachers from professional reading was reported to have been used as follows:

Ideas adapted and put into practice. Basis for discussions in teachers' meetings. Basis for discussion of course of study. Stimulated further reading.

# TESTING EFFICIENCY OF INSTRUCTION

Testing the efficiency of instruction through the application of standards, tests, and scales is not an uncommon practice among Illinois superintendents. Thirtynine of the eighty-eight superintendents reporting stated that one or more tests and scales had been used in their schools, while forty-nine reported no use of such tests. The most frequently used was the Courtis Arithmetic Tests. Thorndike's Handwriting Scale was also used by a number of superintendents. Table XIV shows the grades in which each test was used and the relative standing of each city as compared with the standard or average.

## TABLE XIV.

Grade 1	2	3	a	5	В	7	8	shove	helow	normal
Courtis Arithmetic Tests 0				13	14		12	6	9	2
Stone's Arithmetic Tests	ш						2	1	2	
Thompson's Minimum										
Essentials	1	6	7	6	7	7	7	1	2	
Rice's Spelling Tests	1	2	2	2	2	2	2	1	2	
Hillegas' Composition Scale	1	2	22	2	2	2	2	1	1	
Thorndike's Handwriting										
Scale	1	8	8	8	9	9	9	2	1	
Ayres Penmanship Scale	8	4	7	7	7	7	7	0	2	2
Thorndike's Drawing Scale			1	1	1	1	1			
Thorndike's Reading Scale					1	1	1			

# THE COURSE OF STUDY.

The making of the course of study and the time allotments for each subject are regarded as important duties of the superintendent. How does the Illinois superintendent perform these duties?

A printed course of study was in use in seventy-nine of the eighty-eight cities reporting while the Illinois state course was the course in use in nine cities. Of the sev-

enty-nine, twenty-four were revised annually, four biennially, 5 quadrennially, and two were in continuous process of revision. In these revisions the teachers aid in fifty-three of the cities. In fourteen cities the printed course is supplemented by special bulletins relating to specific subjects of the course.

The general character of these courses is revealed by

the figures of Table XV.

## TABLE XV.

-								-	-	==		-	 _		_			_
	1.	Outlines	work	by	pages	for	semester									٠,٠	52	
	2.	Outlines	work	by ]	pages	for	months					2	 ٠.				22	
	3.	Outlines	work	by :	pages	for	weeks						 	٠.			1	
	4.	Outlines	work	by	pages	for	days				0/0						.1	

From this table it may be seen that the prevalent type of course is one outlined by pages for the semester with some of the important topics marked for emphasis.

Nineteen of these courses prescribe the number of minutes per day, twenty, the number of minutes per week, and five, the number of minutes per month to be given to each subject.

The following table sets forth the freedom granted

the teacher in administering the course.

## TABLE XVI.

Latitude in carrying out details of work Freedom in substitution of topics Extent of oversight of special supervisors	37	Little 19 16	None 16
		21	10
Supervision of course of study by Principals	. 8	10	27

The current practice seems to be to allow the teacher much liberty in administering the course with a minimum of interference from those higher up. This situation does not hold, however, in the matter of promotions. A closer relationship seems to exist between teacher and superintendent or principal.

## TABLE XVII.

Promotions	made	by	teachers alone
Promotions Promotions	made made	by by	principals alone

## THE RATING OF TEACHERS

The returns of the questionnaire on the topic of The Rating of Teachers, indicates that this is a phase of supervision which has as yet received little attention.

The utility of a usable rating scheme for teachers, especially in the larger cities, can scarcely be questioned. It presents perhaps the most valuable aid to the city superintendent in placing his teachers, in selecting new teachers, and in keeping a check upon all the teachers under his supervision.

It is, however, a very fertile cause of jealousy among

teachers and of trouble for the superintendent.

There is a great temptation on the part of the superintendent to overrate the poor teacher, thus giving the poorer teacher an apparent and undue equality with the better teachers in matters of promotions and salary. Thus the rating scheme is liable to defeat its own purpose by equalizing apparently the good and poor teachers, the very condition which a rating scheme is designed to correct or prevent.

The results of the questionnaire emphasize the fact that years of service and previous preparatory training are the only items which enter with any degree of uniformity, into the actual working rating schemes of Illi-

nois superintendents.

The replies to the question relating to training in service, show that this is a question which has not yet been recognized as important in the practice of most superintendents.

The reason for the lack of a more common use of

rating schemes for teachers is not difficult to find. It is doubtless partly due to the short tenure in office of the average superintendent, and partly too, to the short tenure of teachers.

#### THE RATING OF TEACHERS

Column I shows the number of superintendents reporting this item.
Column II shows the number of superintendents rating this item.
Column III shows the average of the percentage ratings for the item.
Column IV shows Ruediger and Strayer's ranking* for the item.
Column V shows the ranking of these items as determined by this inquiry.

Rating systems for promotion20				
Rating systems for salary increase 41				
Years of service35	13	40%		
Preparatory training38	15	23%		
Training in service		/0		
a. Travel	6	14%		
b. Home study21	9	14%		
c. Summer school27	11	15%		
Grade of certificate	8	12%		
Success rating (a) by principal11	4	16%		
(b) by superintendent. 21	9	50%		
ITEMS IN RATING SCHEMES		,,,		
Experience	13	6%	8	11
General teaching merit30	13	10%	2	4 1/2
Health35	14	9%	11	6 1/2
Personal appearance36	16	7 %	10	8 1/2
Initiative or originality34	15	9 %	3	6 1/2
Strength of personality37	15	12%	4	2 1/2
Teaching skill or method37	16	10%	2	4 1/2
Ability to control36	16	12%	1	2 1/2
Following suggestions34	13	6%	6	11
Accord with pupils31	14	7%	7	8 1/2
Progressive scholarship, or studious-		,,,		
ness	12	5%	Б	
Social factors outside of school20	9	6%	9	11
Actual attainment of pupils, or class		,,,		
room results33	15	13%		1
Other items, miscellaneous 6	2			

*Journal Educational Psychology, Vol. I. p. 272.

While the number of superintendents reporting a rating scheme is rather large, ranging from 20 to 27 for the various items, the number of superintendents who are able to report an actual percentage rating for the various items is rather small. No one item is rated in percents by more than sixteen superintendents, and there are probably not more than a dozen superintendents in

Illinois who are actually using a percentage rating scheme for their teachers.

Column IV of the table shows the ranking of the various items as found by Ruediger and Strayer, and Column V. shows the ranking as determined by the questionnaire. In the case of two or three items having the same percentage value their rank is found by averaging the ranks they would have had; e. g. items 6 and 7 each having a value of 12% would have been of rank 2 and 3, but since they are valued as equal they are given a rank the average of 2 and 3, i. e. 2.5.

Below is reproduced a rather complete rating scheme in use at Canton, Ill. It is shown for its suggestiveness. The scheme was devised by A. C. Boyce.

## EFFICIENCY RECORD.

Teachergrade taughtExperienceyrsSalar
8 Academic preparation
• · · · · · · · · · · · · · · · · · · ·
Professional preparation
GENERAL RATING
DETAILED RATING
I. Personal Equipment:
1. General appearance
2. Health
3. Voice
4. Intellectual capacity
5. Initiative and self-reliance
6. Adaptability
7. Accuracy
8. Industry
9. Enthusiasm and optimism
10. Integrity and sincerity
11. Self-control
12. Promptness
18. Tact
14. Sense of justice
II. Social and Professional Equipment:
15. Academic preparation
16. Professional preparation
17. Grasp of subject-matter
18. Understanding of children
19. Interest in life of school
20. Interest in life of community
21. Ability to meet and interest parents
22. Interest in lives of pupils
23. Co-operation and loyalty
24. Professional interest and growth

	25.	Daily preparation	
	26.	Use of English	
III	. Sc	hool Management:	
	27.	Care of light, heat, ventilation	
	28.	Neatness of room	
	29.	Care of routine	
	80.	Discipline	
IV	. Tee	chnique of Teaching:	
	31.	Definiteness and clearness of aim	
	32.	Skill in habit formation	
	33.	Skill in stimulating thought	
	34.	Skill in teaching how to study	
	85.	Skill in questioning	
	36.	Choice of subject matter	
	37.	Organization of subject matter	
	38.	Skill and care in assignment	
	89.	Skill in motivating work	
	40.	Attention to individual needs	
V.		sults:	
٠.	41.	Attention and response of class	
	42.	Growth of pupils in subj-matter	
	43.	General development of pupils	
-	44.	Stimulation of community	
	45.	Moral influence	

## THE RATING OF RECITATIONS

Doubtless one of the most valuable supervisory devices is a usable scheme for the rating of recitations.

It aids the superintendent to do much more thoroughgoing work in class room visitation, by preventing the neglect of essential minor details. There is a frequently recurring tendency on the part of the superintendent to emphasize certain essential points to the exclusion of others which may be called minor ones, but which are nevertheless quite important in judging the real distinction between expert and mediocre teaching.

The rating scheme helps to hold all points, both essential and minor ones, in proper perspective.

A usable rating scheme is a great aid in diagnosing difficulties, by passing in review all the elements which enter into a recitation. It thus becomes a valuable guide both to the superintendent and to the teachers. In fact this is its chief value to the teacher for it will aid her in discovering and diagnosing her own weak

points and thus become the first step toward correcting

weaknesses and attaining to greater efficiency.

The results of the questionnaire indicate that but few Illinois superintendents make use of a fully organized rating scheme for determining the efficiency of class room instruction. They do show, however, that a large number of the superintendents make a very considerable use of the various points contained in the questionnaire.

Reference to the questionnaire blank will show that the topic, The Rating of Recitations, is divided into five parts, viz, (a) The Teacher's Attitude in Class, (b) Asking Questions, (c) Criticising Pupils, Replies, (d) Drills,

(e) Assignment of Lessons.

The tabulation of results has been arranged so as to show by ranking the relative importance of the various items as indicated by the number of superintendents

checking these items.

The writer believes that the relative importance of the various items is fairly well indicated by this ranking. While the small number of cases casts some doubt upon the validity of the rating, it is not probable that the ranking under any heading would be greatly changed by a larger number of cases.

Any teacher or superintendent can safely consider the items ranking first under each heading as of prime importance, and the lack of these characteristics as indicative of serious weakness in class room instruction.

#### THE RATING OF RECITATIONS.

^{1.} The Teacher's Attitude
Sitting
Standing
Textbook in hand
Record-book in hand.
Alert
Talking too much
Time spent in passing papers
Time collecting papers

Attention to discipline in class in other group in passing to and fro Delaying class for slow pupils

Asking Questions

Calling on pupils in order as seated Calling on pupils alphabetically Requiring all to think out reply before calling for answer Questions answered by brief statements Questions answered by years and months Questions requiring memory only Questions requiring reasoning Questions from text books Questions more or less associated with lesson Leading pupils to ask questions Repeating pupils' answers

3. Criticising Pupils' Replies

Constructive criticisms Destructive criticisms Encouraging criticisms Discouraging criticisms Having pupils criticise others' replies Helping pupils finish replies Holding pupils responsible for assignment Correcting grammatical errors in replies

- 4. Drills: On habit-process and tables On facts, dates, names, dates On rapid thought or reasoning
- Assignment of Lesson: Part time study-recitation Percentage of time for assignment

Accuracy of assignment Suggestive fact and thought questions in assignment Assignment of seat work Assignment of written work

Items are ranked in each subhead, a, b, c, d, e, according to their frequency. It is thought that ranking in this manner will be of greater value than a single ranking for the entire list.

Scale for Rating Qualities of Classroom Efficiency in Elementary School Teachers proposed by

-						-	
			Excellent	Good	Fair	Poor	Very poor
1.	Speech (Check	Modulation Clearness of Enunciation Rate Quality { Nasal					

2.					 1
	Governing Skill				 
	(a) Cheerfulness				 
	Check (b) Naturalness				
	(c) Constrained obedience (d) Disobedience				
3.	(d) Disobedience				
8.	Use of English				
	Check (a) By teacher				
	"good or bad" (b) By pupils	П			 
4.					
	Skill in organization of material				
	of the recitation	и			 
5.	Ability to fix the recitation units				
	proper setting in the course, i.e. making the proper connections with				
	preceding and with following recitations.	П		1	 1
6.	Proper stressing of relative values	i			
	distinguishing fundamental from accessory				
7.	Skill in habit-formation		 	[	 
8.	Skill in questioning				
	(a) Thought provoking				
	(b) Clear				
	(c) Too many				
-	(d) Too difficult				 
	(e) Irrelevant		 ]		 
	(f) Suggesting the answer				
9.	Skill and care in assignment				
10.	Choice of illustrative material				
10.	Choice of mustrative material				
	SchoolTeacher				
	Date				
		-			 

# CONCLUSION.

The amount of work involved in the Illinois School Survey was more than teachers who coöperated thought it would be. The superintendents and principals who have been called upon to furnish the data of the survey have found that the filling out of the various questionnaires has sometimes been burdensome. In some cases, even where the work was entered into sympathetically and with the spirit of coöperation, it meant several hours of valuable time as in the case of this particular investigation. Some school men who have not entered into the task with this spirit found the task

of aiding the survey very burdensome and distasteful. This attitude is indicated by the following quotation from a letter which was returned with the questionnaire from a northern Illinois superintendent:

"The mechanical features which I suppose are necessary in such a survey I can't bring myself to be in sympathy with. Matters of judgment in superintendence, such as the rating of teachers largely is, can hardly be measured materially. It is as if I were asked to express the importance in weight % of my love of liberty as compared to my fear of a red hot poker in the hands of a maniac.

"I trust that you appreciate my view point and if I am wrong I am sure more experience and training will bring about a change."

No one who has replied to the questionnaire knows better than the writer how arduous are the duties of the average Illinois superintendent, and how many are the demands upon his time and energy, and the criticisms appearing throughout this discussion are not meant as criticisms of men but of conditions, many of which are beyond the control of the men working under these conditions.

The following summary of the activities of the average Illinois superintendent is not meant as an adverse criticism. It sets forth what seems to the writer to be valid conclusions of the replies to the questionnaire.

If any school superintendent finds that he is doing less than the average it is hoped that the summary may be a spur to greater activity and increased effort to attain at least average efficiency. Those who are already doing more than the average may find in the summary encouragement to greater activity and efficiency.

## THE AVERAGE ILLINOIS SUPERINTENDENT.

The average Illinois superintendent:

visits 9 teachers daily in group I; 2 daily in group III. makes written notes of his visits.

follows up his visits with personal conferences with teachers. makes no preparation for his visits.

holds 1½ teachers meetings per month during the year. spends 75 minutes in teachers' meeting per month during the year.

outlines teachers' meetings in advance. outlines teachers' meetings without aid of teachers. does not summarize meetings afterward in bulletins

requires or expects teachers to make some preparation for meetings. holds no separate meetings for teachers of the various grades. makes State Reading Circle books the basis of general meetings.

held no meetings last year for the discussion of: Playground Supervision, Teachers' Pensions, Salary Schedules, or Community Activities.

attaches more importance to classroom instruction and discipline than to the above topics.

attaches more importance to classroom instruction than to discipline encourages his teachers to attend state and district meetings.

is unable to mention any specific use of the information gained at such meetings.

sends 90% or more of his corps to one or more of such meetings.

attended two such meetings last year.

paid his own expenses to such meetings.

and his teachers received their regular salaries when at these meetings. prescribes specific books and magazines for the professional reading of his teachers.

holds teachers responsible for some such reading.

has a professional library for teachers in his school, (In groups I and II only)

offers no incentives, aside from requirement, for doing such reading. makes no use of printed or mimeographed bulletins for any purpose. has made little use of standard tests and scales for measuring the

efficiency of the instruction in his school. has a printed course of study.

does not revise his course of study oftener than once in 5 years. enlists the aid of his teachers in revising it.

outlines the curriculum by semesters but not by months or weeks. gives his teachers little or no latitude in carrying out the course of study.

exercises little or no supervision over the details of the work of special supervisors.

cooperates with teachers in making promotions.

The average Illinois superintendent:

does not have a well defined scheme for rating or ranking teachers: ranks items in "Teachers attitude in recitations," as follows:

1 Alert

2 Talking too much

3 Attention to discipline in class

4 Attention to discipline in passing to and fro

5 Delaying class for slow pupils

Attention to discipline of group not reciting

7 Time spent in passing
8 Time spent in collecting papers
ranks items in "Asking questions," as follows:

- 1 Leading pupils to ask questions

- 1 Leading pupils to ask questions
  2 Questions requiring reasoning
  3 Questions requiring memory only
  4 Requiring all to think the answer before calling for answer.
  5 Questions more or less related to lesson.
  6 Calling on pupils in order as seated
  6 Answering questions by brief statements
  6 Repeating pupils' answers
  ranks items in "Criticisms of pupils' replies," as follows:
  - 1 Holding pupils responsible for assignments
    - 2 Constructive criticisms
- 3 Encouraging criticisms
  4 Grammatical errors in replies
  5 Having pupils criticise others' replies
  ranks items in 'Assignment of lessons,' as follows:

  - 1 Accuracy of assignment 2 Assignment of seat work 3 Assignment of written work 4 Part time study-recitation

  - 5 Use of suggestive fact and thought questions in making assignments.

# ILLINOIS SCHOOL SURVEY FINANCE

President David E. Felmley, Illinois State Normal University.

The purpose of the survey of the finances of the public school system of Illinois is to ascertain whether or not the burdens of public education are equitably distributed, whether there is in any quarter extravagance and waste of the public funds, whether the schools at any point are so poorly nourished as to be weak and inefficient, and finally, whether the machinery of administration is economical and efficient.

As a result of this survey six recommendations are made.

1. That the state school tax be fixed at such a rate that it will yield two mills on the dollar for distribution to the schools after all deductions for the salaries of county superintendents, pensions, high-school tuitions, and other special purposes have been made.

2. That to equalize local inequalities, school tax should be levied in each county, equal in amount to the tax received from the state, the same to be distributed within the county on the basis of the minor population.

3. That laws be passed requiring the elimination

from the school system of small weak districts.

4. That the school township be abolished as an administrative unit, the state to borrow all the township funds, the county treasurer to hold all school funds, the county superintendent to determine all changes in district boundaries.

5. That where township high school districts now exist, or are hereafter to be created, the elementary school district should by consolidation be made coterminous with the high school district with one school

board, one tax-rate, one administration for the entire

territory.

6. That the revenue clause of the present high school tuition act be so modified that the tuition of pupils residing in non-high school territory shall be paid from the school funds of that territory, not from the funds of the entire county.

# ILLINOIS SCHOOL SURVEY.

# FINANCE.

The constitution of Illinois lays upon the General Assembly the mandate that it shall provide a thorough and efficient system of free schools whereby all children of the state may receive a good common school education. Both by action of the legislature in providing for township high schools and by previous decisions of the supreme court it is recognized that a "good common-school education" includes what are ordinarily called high school branches. In the present state of educational sentiment in the United States no system of schools will be called thorough and efficient unless it provides reasonable high school opportunities for every child in the commonwealth.

The free-school system of Illinois grew out of earlier neighborhood schools supported in part by public funds derived chiefly from sale or rent of the school lands, but chiefly by tuition fees paid by the parents. The free school act of 1855 required the school board to levy a district tax sufficient to support the school for six months each year. If the property of the state had been distributed among the several counties and districts in proportion to their population, if there were distributed in the same manner an appreciation of the value of education, and local leaders of initiative, intelligence, and public spirit to carry out the educational purpose of the

state, possibly no other tax would have been necessary or advisable; for it is a cardinal doctrine of our American democracy, that local self-government prevents extravagance and waste and elicits a larger measure of interest in public affairs.

# THE STATE SCHOOL FUND.

But in 1855 neither property nor educational initiative were thus proportionately distributed. Accordingly the legislature provided a state school tax of two mills on the dollar to be distributed among the counties and to the districts according to their minor population. No district could share in the distribution of this state fund unless it maintained a legal school for at least six months. This fund, therefore, was provided partly to equalize the burden of public education, partly to stimulate school sentiment where school terms had been short and schools poorly supported.

Besides the two-mill tax there has flowed annually into the distributable state school fund the interest at six percent upon the Permanent State School Fund (2½ percent of the net proceeds of the sale of public lands) of \$613,362.96 and upon the Treasury Surplus of 1837 deposited with the State of Illinois, \$335,592.32. The total revenue from these two sources is \$56,937.31 per

annum.

In 1872 the two-mill tax yielded nearly one million dollars. The following year, in order to expedite the annual distribution by the auditor a flat levy of \$1,000,000 was substituted for the two-mill tax. The annual levy remained at \$1,000,000 for 39 years thereafter although the state had doubled in population, quadrupled in wealth during that period. In 1911 the levy was made \$2,000,000; in 1913, \$3,000,000; in 1915. \$4.000.000.

Since 1883 the salary and expenses of the county su-

perintendents of schools (\$193,410 in 1914) have been paid from this fund, the remainder distributed to the various county school funds amounted in 1914 to \$2.75 per pupil enrolled in the public schools. In 1916 about \$150,000 of the augmented fund will be transferred to the State Teachers Pension Fund. The remainder will yield about \$3.40 per child enrolled which is about one-ninth of the average current expense, one-twelfth of the total per capita expense of maintaining the public schools.

Is this state aid adequate?

In 22 counties forming a compact area in southern Illinois the average length of the school term is less than 6.8 months. These counties contained in 1910 a population of 470,433, or 8.3 percent of the total population of Illinois. But as compared with the state's total the assessed valuation of their property is only 4.5 percent. Yet this is not because of undervaluation in the assessment for, according to the wealth statistics of the Federal census these counties contain only 3.6 percent of the whole wealth of the state. In other words, the local assessors of these counties are assessing property 25 per cent higher than the local assessors elsewhere in the state. According to the assessed valuation, where the state at large raises \$100 by taxation, these counties must raise \$184 if an equal per capita expenditure is to be made for public education.

Of the 2,514 teachers in Illinois receiving less than \$300 as annual salary 1,277 (more than half) live in these counties containing only one-twelfth of the people of the state. In them the average annual salary is:

For men teachers	319.09
For women	\$ 796.19

In the country schools of these 22 counties the average enrollment per school is 36, while in the country

schools of twelve counties of northern Illinois the average enrollment is less than 18.

In the country schools of these 22 counties the average annual cost per pupil enrolled is \$11.07, while in the country schools of the 17th Congressional District the average annual cost per pupil enrolled is \$29.25. In ten counties of northern Illinois it exceeds thirty dollars.

The average annual attendance of each pupil is 88 days, just 4 months. In the state at large it is 110 days, just 5 months. In the 12th Congressional District it is 133 days.

To summarize, in just those sections of the state where there is least wealth per capita we find the people devoting to education the largest fraction of their wealth. Yet here the schools are crowded, attendance irregular, the school term shortest, and the teachers relatively poorly prepared and ill paid. The school property of these counties is only 4.1 percent of the school property of the state; hence we may infer that in buildings, furniture, apparatus, libraries, etc., the schools are only half way up to the average standard prevailing throughout the state.

We justify education at public expense chiefly on two grounds: (1) because it is vital in a democracy that political intelligence and public spirit be fostered; (2) because the productive efficiency of our people is our greatest national resource. A wise system of education develops the qualities of intelligence, character, and skill upon which efficiency depends. With the extreme mobility of modern populations, no portion of our state can protect itself from the low types of citizenship and workmanship bred where education is neglected. It is to the interest of every citizen of the state that every child in the state have a reasonable opportunity to develop intelligence and character.

## WHAT SHALL BE THE MINIMUM?

To secure a school year of eight months and a minimum annual salary of \$400 per teacher, these counties must increase their school revenues at least 40 percent. They are already taxing themselves heavily. In Pope county, for example, only 30 out of 71 districts can increase their present rate forty percent without overstepping the legal limit for current expenses \$1.50 per \$100 of assessed valuation. Only thirteen of the seventy-one can possibly raise \$500 per year for educational purposes.

In many of these counties are large mining communities with numerous children. It is of the highest importance that these children be trained in the ideals of American citizenship. Furthermore the industrial prosperity of the entire state depends upon the adequate development of her coal fields. There would be no railroads, no agricultural machinery, no 300-dollar-per-acre land if men could not be found somewhere to go down into the earth and dig coal.

# How Large Should the State School Tax Be?

In the nine counties in which less than ten dollars per pupil is spent upon the 28,175 children in the one-room schools the running expenses of these schools in 1914 averaged \$359.54, while in the state at large the running expenses of one-room schools was \$497.63. In the five counties Sangamon, Logan, Macon, Piatt, and Moultrie the cost of one-room schools averaged \$654.52.

Of the \$359.54, about 23 percent (\$83.90), was contributed by the state; the remainder, \$275.64, from the district tax and other sources.

In these districts the present tax levy is about 70 percent of the possible levy; hence if every district should levy to the limit the average income from this source would be about \$390.

To maintain a respectable country school for eight months at least \$500 is required: \$400 for the teacher. \$100 for other expenses; hence \$110 per school from the state would put these schools on a respectable footing provided every school levied to the limit and the property was equally distributed among the various districts. Because of the existing inequalities the contribution of the state should be somewhat larger. The two-mill tax so often regarded as a just state tax would yield for the state an average of \$155 per teacher: This tax without deduction for county superintendents' salaries, highschool tuitions, or pension funds, and supplemented by an equalizing county school tax and a proper adjustment of the district boundaries would enable every community to maintain a respectable school. In other words, the state school tax should be ample to cover one-third of the current expenses of the elementary schools in the poorest counties, or \$5,000,000 in the aggregate. I should further provide whatever may be needed for the pension fund and for the salaries of the county superintendents. The greatest portion of the fund should be distributed to the counties according to their population just as at present. Other bases of distribution have been proposed: such as the aggregate daily attendance, the amount of local taxation, the number of teachers, but these all tend to increase rather than reduce the inequalities in the burden of education. Just as in Chicago the loop district and the north shore are taxed to educate the children of the crowded tenement districts, so the rich lands of the corn belt should share proportionately in the education of all the children of the state. It should also provide funds to stimulate desirable features of education such as vocational courses to which communities are not accustomed, but which are demanded by the highest interests of the commonwealth.

# THE COUNTY AS A TAXING UNIT.

At present the state school fund distributed to the counties is passed on to the townships with only such increment as is received from fines and forfeited bonds. But just as the state school tax serves to equalize the burdens among the counties and various geographical sections of the state, so a county tax further reduces the local inequalities within the county. If a railroad crosses a township the districts traversed receive all the local school taxes paid by the railroad while the other districts of the township contribute proportionately as much to the freight and passenger receipts out of which the railroad must pay its taxes. In every county there is much property that escapes with a very light tax. Just south of Galesburg lies a school district containing a plant for the preservative treatment of railroad ties. The assessed valuation is \$340.653, the tax rate 15 cents on the hundred dollars, the teacher's salary \$42.50 per month, the average attendance 12 pupils. This district contains more property than the total in eleven other country districts in the same county with an average school attendance of 210 pupils. Most of the workmen employed in this place live in the city of Galesburg. The city must educate their children with no direct help from the property which the labor of these men makes productive This case reveals

# THE CORRECT PRINCIPLE OF LOCAL TAXATION

namely, that property should be taxed for the education of the children of the men and women whose labor makes the property productive. All through our state this principle is violated to the disadvantage of the towns. In the towns live the miners who go out by train loads to work mines outside the school district limits. In the towns live the track repairers, station agents, and other railroad men with children to be educated. Part of the

country districts share in the railroad taxes. In the towns live the carpenter who builds the farmer's barn, the painter who paints his house, the laborers who help harvest his crops, the blacksmith who shoes his horses, the physician who heals his diseases, the undertaker who buries his dead.

In fact the country town and its tributary farming lands constitute one community in which all the workers are either applying their labor directly to the crops and live stock or contributing to the maintenance of these workers on the farm. The products of the farms constitute the total exports of the community; in the production of these exports all have had some part, all in the end share in the revenue, and from this revenue all community expenses must be paid.

The individual district (say two miles square) is a poor unit for taxation. It is not a true community, it is only a fraction, for in a true community the people act together alike in their business, social, religious, political, and educational affairs. For causes already stated the tax rate in the towns range from two to five times as high as in the surrounding country districts.

The county is a well defined political, social and educational unit. Its unity is well established in the consciousness of the people. Our most efficient school organization is along county lines. It is believed that a county school tax equal in the aggregate to the state tax received by the county, to be distributed among the districts according to their school population will go far towards equalizing the local inequalities of school burdens, and at the same time will appeal to the people as a tax for their own schools. Such a tax may add a county school board to our school system, but there are other useful functions for such a board.

#### THE ONE-ROOM COUNTRY SCHOOL.

The most expensive elementary schools in our system are the small one-room country schools. When we reflect upon the evils of the crowded schools in our mining and industrial districts, we are likely to regard every shrinkage in the enrollment as a district gain. Yet a school may become so small as not to look respectable in the eyes of the pupils themselves. In such schools there is little of the generous rivalry, the comradeship in worthy pursuits, that gives to the school its greatest charm, and highest social value. Interest grows with numbers, and upon interest depends regularity of attendance and the spirit and profit of the work. The best size for a

country school is from twenty to thirty pupils.

Yet throughout all central and northern Illinois schools of this size are not frequent. Thus in Knox county out of 160 one-room schools, 45 report an average attendance of fewer than ten pupils; 61 from 10 to 14 pupils; 30 from 15 to 19; 21 from 20 to 30; only one school above 30 pupils. This condition is typical except in dairving districts with their smaller farms, or where foreign-born parents are rearing large families. A resolute effort should be made to eliminate these small, wasteful, and inefficient rural schools. Two plans are proposed: 1. Consolidation, which will probably make slow progress until there is vast improvement in our roads. 2. The subdivision of weak districts among the neighboring districts. Where districts are laid off regularly two miles square, each alternate district may be quartered by drawing its diagonals. If the triangles thus formed be annexed to the adjoining districts, we come out with a system of districts each containing eight square miles, but with no child living more than two miles from the school house and with the chief roads running straight in from the corners of the district.

This scheme cannot now be applied universally, but

it may be made the basis of a plan for eliminating the weak districts. Helpful legislation would be measures:

1. Providing that no school with average attendance of less than say twelve pupils shall receive any state or county aid unless the area of the district is at least six square miles.

2. Providing that if for three consecutive years the average attendance shall be less than ten pupils, the district must be discontinued and its territory

added to one or more adjoining districts.

A large number of these weak districts lie next to towns or villages. The land owners resist annexation because of the higher tax rate prevailing in the town districts. A peculiarly unjust and vicious recent bit of legislation permits a district to close its school and pay the tuition of the pupils while attending some other district. Fifty-seven districts took advantage of this act in 1914. It enables landowners to escape their just school taxes, and compels parents to transport their children to other districts or forego the advantages of public education. The great obstacle to a wise adjustment of district boundaries is the desire of certain land owners to escape the burdens of taxation. They regard taxes not as an investment in a highly profitable coöperative undertaking; but merely as an item of individual expense to be kept at the lowest possible point.

## THE TOWNSHIP FUND.

One hundred years ago the principle of general taxation for the support of free public schools was accepted in only four of the states of the American Union. Most of our public men recognized the importance of education in a democracy; but regarded it as the proper function of the state to create endowments from whose income schools might be partially supported.

Accordingly, to Illinois, as to other states of the Northwest territory, the sixteenth section was granted as school land whose income was to be used perpetually to support the schools of the township. Illinois thus received a million acres, and had the land been held to the present time the income from the agricultural lands would probably average \$3,000 per township, between four and five millions in the aggregate; and the income from city lots would reach several times this sum. But in early Illinois few settlers wished to rent school lands. They desired to own their farms. The settlers who did not care to buy the lands themselves were anxious that the lands should be sold and the money loaned in order that some income might be available at once for school purposes.

Accordingly, we find of the million acres only six thousand eighty-eight acres left unsold, which yield an annual income of about \$700,000. The ten per cent of the lands located in Cook County yield 96 percent of the income. The 5,466 acres outside of Cook County, including a little city property, yield about five dollars per

acre.

The fund realized from the lands sold now amounts to \$6,630,000. The annual interest derived from this fund is nearly \$350,000, a little more than five percent of the fund. The total income from interest and rents was, in 1914, \$1,038,270.26, about one dollar per school child enrolled in the public schools, hardly one-fortieth of the total expense of the schools.

The township funds are administered by the oldest school officers in the state, namely, the township trustees. The total expense of such administration, including the compensation of township treasurers, is about \$225,000. In thirty-six Illinois counties the expense of administration is greater than the total income from the fund.

There is a conviction in many quarters that the school township is a sort of vestigial organ in the Illinois school system. It figured largely in the early day when public school finances clustered about the sixteenth sec-

tion and its proceeds. Today there is a growing conviction that both economy and efficiency of administration will be promoted by the abolition of the school trustees and their treasurer.

The trustees at present have three functions:

1. Titles to school property run in their names, except in the districts under special charter. I see no good reason why such titles should not vest in the Boards of Education of the several districts who have immediate charge of the property and are responsible for its maintenance.

2. The Board of Trustees, when properly petitioned, may change the boundaries of districts. But this action in every case is subject to review by the county superintendent and in most cases the decision is taken to him by appeal. Why not let the county superintendent be the only official empowered to change district boundaries? Districts are now regarded as divisions of the county, they are numbered accordingly. Change in their boundaries is really a county function.

3. The third function of the Board of Trustees is to care for the permanent township fund, to keep it safely invested, to apportion among the several districts its income and the moneys received from the county dis-

tributable fund.

If the permanent township funds were all loaned to the State of Illinois as the permanent fund of the University of Illinois and of the State Normal Universities are loaned, and the state would pay annually the interest on these funds, the administration would cost very little indeed, for the only labor involved would be the labor of the Auditor's office in writing 102 warrants upon the State Treasurer each year in favor of the several county superintendents, to whom this interest should be paid for distribution among the several districts. The township treasurer is now treasurer for the several school districts within his township, but with

the development of modern banking the actual handling of school moneys makes the office of the treasurer largely a sinecure, for his banker holds the district funds and keeps his accounts for him. If the school funds of the county were placed in the hands of the county treasurer there would be greater economy in the accounting and probably greater accuracy in the reports than exists at the present time.

With the development of our school system it has been found more and more necessary to place upon the county superintendent certain responsibilities formerly

belonging to the trustees.

#### TOWNSHIP COLLECTORS OF TAXES.

Our obsolete tax system is another source of waste. As taxes are now collected, the two per cent commission allowed the tax collector is far in excess of the value of his services. Taxes should be paid directly to the county treasurer, or to his representatives in the various approved banks of the county.

## FINES AND FORFEITURES.

Another survival of an early method of financing education is the requirement that certain fines and forfeited bonds shall be turned into the school funds. But for many years it was the practice in Illinois to pay county officials out of the earnings of their respective offices. The states attorneys were paid by the case, and paid from the fines and forfeited bonds. They came to look upon these moneys as their legitimate earnings. At present a definite salary has been provided for the states attorneys themselves, but there is a statute providing for assistants to be paid from the moneys before mentioned. In this way most of the fines and forfeitures are diverted from the school treasury. A thrifty state's attorney might arrange for enough pleas of guilty of

gambling, carrying concealed weapons, selling liquor without license, and other misdemeanors to absorb all the fines and forfeitures actually collected.

Thirty years ago \$33,000 was thus secured—now less

than \$20,000 in the entire state.

#### HIGH SCHOOLS.

In 1914, 596 high schools reported to the superintendent of public instruction. Of these 82 are township high schools. The average cost per pupil enrolled is \$63.72. In the thirty-seven high schools of Cook County the average cost is \$84.72. In the rest of the state with two-thirds of the high-school pupils the average is \$52.60. It is to be noticed that only eleven of the 82 township high schools fall below this down state average. Some of the small township high schools reveal a very high per capita cost, two of them exceeding \$175. In the 28 township high schools enrolling fewer than 75 pupils the average cost is \$90.21 per pupil enrolled, while in the 21 high schools enrolling 76 to 100 pupils the cost average is \$58.87; in the 13 high schools enrolling 151 to 250 pupils, the cost averages \$58.59; in the 9 high schools enrolling 251 to 400 the cost averages \$75.72. In the 5 large township high schools exceeding 50 in enrollment, four of them in Cook County, the average per capita cost for current expenses is \$103.30 per pupil enrolled.

This cost is fifteen dollars greater than in the Chicago high schools and almost double the cost, \$52.61, in the 15 down state district high schools enrolling over 500 pupils. There are several reasons for the high cost of township high schools. In the smaller it is largely due to the tendency to imitate the organization of the larger schools, and to employ more teachers than the size of the school justifies in order to comply with certain rules im-

posed upon accredited high schools.

Just now township high schools are multiplying rapidly. This means that in a short time most of the people of the state will have their school affairs managed by two boards of education. There are other evils in dual control besides increased expense. In the opinion of the writer efficiency as well as economy demands that the elementary school district shall be coterminous with the high-school district, with one school board, one tax rate, one administration, for all the schools of the territory.

The revenue clause of the existing high-school tuition act causes the cities and towns not only to bear the whole expense of educating their own high-school pupils, but also to bear a large share of the expense of educating the high-school pupils residing in the country, the region already paying too little school taxes.

# STUDENT POPULATION AND RELATED PROBLEMS IN HIGH SCHOOLS

Prof. J. A. Clement, Northwestern University

#### Introduction

Originally seven blanks were sent out to the high schools of the state of Illinois, including representative sections. About one-fourth of the blanks were returned filled out. The questionnaire covered the school year 1913-1914. The blanks were entitled as follows: No. I enrollment by years or classes, and by ages; No. II school enrollment, census, and daily attendance; No. III permanent withdrawals; No. IV enrollment and failure in different subjects; No. V probable causes of failures; No. VI number of years spent by graduates, and mortality within a single Freshman class; No. VII ages of graduates, and later activities of pupils.

The greatest number of replies were received on No. I, and so this part of the high school material has been written up in more detail than in case of any of the other blanks sent out. The material received on No. II was too meager and incomplete to be significant, and so it has not been tabulated at all. These results would, no doubt, have furnished some valuable information relative to school expenditure of money had the facts been available in the form called for by blank No. II.

## ENROLLMENT IN HIGH SCHOOLS

Blank No. I, as already indicated, consisted of enrollment of high school pupils by years or classes, as well as by ages. This first summarized tabulation is presented in the form of percentages for the whole group added

¹Gratefulness is here expressed, to principals and to other persons authorized to fill out the blanks, for the replies which were returned.

together. Table No. I, section (A), represents these results for forty-four of the high schools which reported outside of Chicago.

Out of the total number of 10,336 pupils, 40.33 percent are Freshmen; 25.37, Sophomores; 18.99, Juniors;

TABLE I, SECTION A, REPRESENTS FORTY-FOUR SCHOOLS OUTSIDE OF CHICAGO.

			Enro	ollment	by yes	rs and	ages.			
Ages	Fre B.	shman G.	Soph B.	omore G.	Ju: B.	nior G.	Sen B.		ot. No. by ages	
12-13	22	16							38	
13-14	236	293	32	23	2				586	6.03
14-15	721	931	188	201	22	25	2		2090	20.22
16-16	566	617	387	533	126	183	19	22	2453	23.73
16-17	268	280	351	448	325	458	100	141	2371	22.94
17-18	73	77	166	169	208	292	268	370	1623	15.70
18-19	37	11	57	45	139	107	200	280	876	8.47
19-20	6	В	7	9	21	28	61	73	211	2.89
20-21	1	1	2	1	9	4	15	16	49	
21-22	1				2	11	3	9	26	
22-23				1		1			2	
23 - 24				1			1	1	3	
24 &	1		2	1					2	
Over	4	1		1					В	
Tot.	1935	2234	1190	1433	854	1109	669	912	10336	
No. by yrs.	4	619	2	234	19	963	18	581		
T. per	46.41	53.58	45.36	54.63	43.50	56.49	42.31	57.68	Boys 8	and girls
by yrs.	40	.33	25	5.37	18	.99	15	.29		

and 15.29 Seniors. By reading the table, also according to classes, it will be seen for example, that the proportionate number of boys and girls enrolled in the Freshman year is 46.41 percent boys, and 53.58 girls. For all the four years the proportionate number of girls is higher than that for the boys, with the largest difference in the last year.

By reading this same table with reference to age dis-

tributions it will be seen that 6.03 percent of all the pupils enrolled are below 14 years of age. 2.89 percent are 19 years of age or above. 82.59 percent are within the years 14-15, 15-16, 16-17, 17-18, respectively.

The results of section (B), in table I, have been presented so that a comparison can be made if desired, between the present group of schools studied, and previous groups concerning which reports already have been published. The 44 schools plus the Chicago high schools make a total of 67 schools. The percentage of this group involving a total of 27.179 pupils is 39.98 for the Freshman year. The U.S. Bureau of Education Bulletin, 1915, No. 6, on pages 41-42 shows that for 102 high schools in Illinois the percentage of distribution for the Freshman year is 39.20. With the exception of the Sophomore year there is practically very little variation between the 67 and 102 groups. Or again it may be seen that the variation in the results between the group of 102 N. C. Association Illinois schools, and the forty-four outside of Chicago involved in the present investigation, is greatest in Sophomore year, amounting to only 1.83 percent. In the Senior year the percentages are 15.20 and 15.29 for the respective groups.

On page 39 of the Leavenworth-Kansas Survey Report, it is stated that the percentage of distribution for the state of Kansas in the Freshman year is 42.46; 26.27 in the Sophomore; 17.38 in the Junior; and 13.89 in the Senior year. The state of Illinois shows the better retention of pupils from the Freshman to the Sophomore year when compared with Kansas. Between the Sophomore and Junior years the percentage of retention is very nearly the same for the two states, and between the

Junior and Senior years.

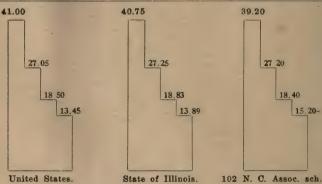
There is a difference of less than one percent in the distribution of Freshmen, Sophomores, Juniors, and Seniors respectively between the State of Illinois, and the United States as a whole. The report of the Commissioner of Education for 1914, on page 18 of volume.

2, shows that 41.00 percent are Freshmen; 27.05 are Sophomores; 18.50 are Juniors; and 13.45 are Seniors. For the state of Illinois the corresponding percentages are: 40.75, 27.25, 18.83, and 13.89. The tabulated results of the 44 high schools of Illinois show that the retention between the Freshman and Sophomore years is a little lower than for the United States. But between the Sophomore and Junior, and between the Junior and Senior years it is a little higher than in the case of the United States as a whole.

Diagram I is a graphic representation of the distribution of pupils for the United States; the state of Illinois; 102 N. C. Association, Illinois schools; Chicago high schools; 44 schools outside of Chicago; and Kansas.

TABLE I SECTION B, SHOWS THE DISTRIBUTION OF ENROLL-MENT FOR UNITED STATES, KANSAS AND ILLINOIS.

T	ot. Enrol.	Fresh.	Soph.	Jun.	Sen.
United States	1,366,822	41.00	27.05	18.50	13.45
State of Illinois	76,084 35,268	40.75 39.20	27.25 27.20	18.83 18.40	13.89 15.20
Chicago H. S. excluding 2 yrs. vocational	16,843	39.63	26.76	18.72	14.87
44 Schools outside of Chicago	10,336	40.33	25.37	18.99	15.29
67 Schools including Chicago H. S	27,179	39.98	25.56	18.85	15.08
State of Kansas	1	42.46	26.27	17.38	13.89



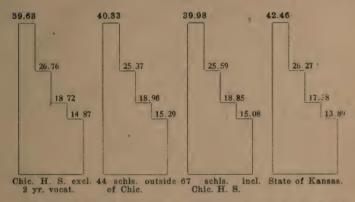


Diagram 1, graphs representing distribution of pupils for the United States, Illinois, and Kansas.

Table II, percentages of distribution by classes, 1913-1914.

School	Tot. Enroll.	Freshman	Sophomore	Junior	Senior
		Group A (	Over 1000)		
No. A.	1639	43.99	29.34	14.58	12.08
No. B.	1209	37.22	27.95	16.54	18.27
No. C.	1197	46.95	25.48	15.20	12.36
No. D.	1028	44.94	20.62	18.38	16.05
Median	1203	44.46	26.71	15.87	14.20
		Group B (	501-1000)		
No. 1	883	46.43	25.48	13.81	14.26
No. 2	819	33.69	30.28	20.51	15.50
No. 3	509	38.11	19.05	21.41	21.4
Median	819	38.11	25.48	20.51	15.50
		Group C	(301-500)		
No. 4	462	38.09	31.16	17.53	13.20
No. 5	454	48.23	21.14	21.58	9.03
No. 6	384	40.10	21.61	17.70	20.5
No. 7	965	40.82	33.15	13.69	12.33
No. 8	363	42.14	25.06	19.28	13.49
No. 9	336	37.20	22.91	26.19	13.69
No. 10	332	40.66	23.19	23.19	12.9
No. 11	- 319	40.43	23.51	21.94	14.10
No. 12	312	44.23	22.43	20.83	12.5
Median	363	40.82	22.91	21.58	13.49

¹Individual schools in Chicago are lettered. Schools outside of Chicago are numbered. The same letters and numbers are used for the schools in the different tables presented.

No. 13			Group D (2	201-300)		
No. 15					23.56	12.45
No. 16						
No. 17						
No. 18						
No. 19						
No. 20						
No. 21 211 42.65 24.17 14.69 18.48 No. 22 210 36.19 25.23 17.61 20.95 Median 254 40.36 25.73 17.65 16.12    Group E (101-200)						
No. 22         210         36.19         25.23         17.61         20.95           Median         254         40.36         25.73         17.65         16.12           Group E (101-200)           No. 23         186         44.08         30.64         16.12         9.13           No. 24         181         39.22         25.96         18.23         16.57           No. 26         167         26.94         32.93         20.95         19.16           No. 27         162         34.56         27.77         16.66         20.98           No. 29         154         27.92         27.27         26.62         18.18           No. 30         147         30.61         29.25         27.89         12.24           No. 31         126         32.53         26.98         20.63         19.84           No. 32         121         40.49         20.66         19.00         19.83           No. 33         111         27.92         20.72         25.22         26.12           Median         155         34.56         26.98         19.00         18.18           Group F (Under 100)           No. 34						
Median         254         40.36         25.73         17.65         16.12           Group E (101-200)           No.         23         186         44.08         30.64         16.12         9.13           No.         24         181         39.22         25.96         18.23         16.57           No.         25         171         47.36         18.12         18.71         15.78           No.         26         167         26.94         32.93         20.95         19.16           No.         27         162         34.56         27.77         16.66         20.98           No.         28         155         43.22         25.16         18.70         12.90           No.         30         147         30.61         29.25         27.89         12.24           No.         31         126         32.53         26.98         20.63         19.84           No.         32         121         40.49         20.66         19.00         19.83           No.         33         111         27.92         20.72         25.22         26.12						
Group E (101-200)   No. 23						
No. 23         186         44.08         30.64         16.12         9.18           No. 24         181         39.22         25.96         18.23         16.57           No. 25         171         47.36         18.12         18.71         15.78           No. 26         167         26.94         32.93         20.95         19.16           No. 27         162         34.56         27.77         16.66         20.98           No. 28         155         43.22         25.16         18.70         12.90           No. 30         147         30.61         29.25         27.89         12.24           No. 30         147         30.61         29.25         27.89         12.24           No. 32         121         40.49         20.66         19.00         19.83           No. 33         111         27.92         20.72         25.22         26.12           Median         155         34.56         26.98         19.00         18.18           Group F (Under 100)           No. 34         99         46.46         20.20         22.22         11.11           No. 35         88         35.22         25.00	Median	254			17.65	16.12
No. 24	37 00	100				
No.         25         171         47.36         18.12         18.71         15.78           No.         26         167         26.94         32.93         20.95         19.16           No.         27         162         34.56         27.77         16.66         20.98           No.         28         155         43.22         25.16         18.70         12.90           No.         30         147         30.61         29.25         27.89         12.24           No.         30         147         30.61         29.25         27.89         12.24           No.         31         126         32.53         26.98         20.63         19.84           No.         32         121         40.49         20.66         19.00         19.83           No.         33         111         27.92         20.72         25.22         26.12           Median         155         34.56         26.98         19.00         18.18           Group F (Under 100)           No.         34         99         46.46         20.20         22.22         11.11           No.         35         88         35.22 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
No. 26						
No. 27 162 34.56 27.77 16.66 20.98 No. 28 155 43.22 25.16 18.70 12.90 No. 29 154 27.92 27.27 26.62 18.18 No. 30 147 30.61 29.25 27.89 12.24 No. 31 126 32.53 26.98 20.63 19.84 No. 32 121 40.49 20.66 19.00 19.83 No. 33 111 27.92 20.72 25.22 26.12 Median 155 34.56 26.98 19.00 18.18  Group F (Under 100)  No. 34 99 46.46 20.20 22.22 11.11 No. 35 88 35.22 25.00 22.72 17.04 No. 36 71 39.43 30.98 21.12 8.45 No. 37 68 51.47 23.52 8.82 16.17 No. 38 62 27.41 45.16 9.67 17.74 No. 39 52 40.38 13.46 21.15 25.00 No. 40 51 29.41 35.29 11.76 28.52 No. 40 40 42.85 18.36 16.32 22.44 No. 42 46 23.91 39.13 17.39 19.56 No. 43 48 37.20 25.58 23.25 13.95 No. 44 40 37.50 25.00 21.12 17.04 Tot. Med. Excl. 198 39.76 25.31 18.85 15.75 Chic. Tot. Med. Incl. 222 40.21 25.44 18.62 15.25						
No. 28						
No. 29 154 27.92 27.27 26.62 18.18 No. 30 147 30.61 29.25 27.89 12.24 No. 31 126 32.53 26.98 20.63 19.84 No. 32 121 40.49 20.66 19.00 19.83 No. 33 111 27.92 20.72 25.22 26.12 Median 155 34.56 26.98 19.00 18.18  Group F (Under 100)  No. 34 99 46.46 20.20 22.22 11.11 No. 35 88 35.22 25.00 22.72 17.04 No. 36 71 39.43 30.98 21.12 8.45 No. 37 68 51.47 23.52 8.82 16.17 No. 38 62 27.41 45.16 9.67 17.74 No. 38 62 27.41 45.16 9.67 17.74 No. 39 52 40.38 13.46 21.15 25.00 No. 40 51 29.41 35.29 11.76 23.52 No. 40 40 40 42.85 18.36 16.32 22.44 No. 42 46 23.91 39.13 17.39 19.56 No. 42 46 23.91 39.13 17.39 19.56 No. 43 43 37.20 25.58 23.25 18.95 No. 44 40 37.50 25.00 21.12 17.04 Tot. Med. Excl. 198 39.76 25.31 18.85 15.75 Chic. Tot. Med. Incl. 222 40.21 25.44 18.62 15.25						
No. 30 147 30.61 29.25 27.89 12.24 No. 31 126 32.53 26.98 20.63 19.84 No. 32 121 40.49 20.66 19.00 19.83 No. 33 111 27.92 20.72 25.22 26.12 Median 155 34.56 26.98 19.00 18.18    Group F (Under 100)						
No. 31 126 32.53 26.98 20.63 19.84 No. 32 121 40.49 20.66 19.00 19.81 No. 33 111 27.92 20.72 25.22 26.12 Median 155 34.56 26.98 19.00 18.18    Group F (Under 100)						
No.         32         121         40.49         20.66         19.00         19.83           No.         33         111         27.92         20.72         25.22         26.12           Median         155         34.56         26.98         19.00         18.18           Group F (Under 100)           No.         34         99         46.46         20.20         22.22         11.11           No.         36         71         39.43         30.98         21.12         8.45           No.         37         68         51.47         23.52         8.82         16.17           No.         38         62         27.41         45.16         9.67         17.74           No.         39         52         40.38         13.46         21.15         25.00           No.         40         51         29.41         35.29         11.76         23.52           No.         41         49         42.85         18.86         16.32         22.244           No.         42         46         23.91         39.13         17.39         19.56           No.         43         37.20         25.						
No. 38         111         27.92         20.72         25.22         26.12           Median         155         34.56         26.98         19.00         18.18           Group F (Under 100)           No. 34         99         46.46         20.20         22.22         11.11           No. 35         88         35.22         25.00         22.72         17.04           No. 36         71         39.43         30.98         21.12         8.45           No. 37         68         51.47         23.52         8.82         16.17           No. 38         62         27.41         45.16         9.67         17.74           No. 39         52         40.38         13.46         21.15         25.00           No. 40         51         29.41         35.29         11.76         28.52           No. 41         49         42.85         18.36         16.32         22.24           No. 42         46         23.91         39.13         17.39         19.56           No. 43         43         37.20         25.58         23.25         13.95           No. 44         40         37.50         25.00         27.50<						
Median         155         34.56         26.98         19.00         18.18           Group F (Under 100)           No. 34         99         46.46         20.20         22.22         11.11           No. 35         88         35.22         25.00         22.72         17.04           No. 36         71         39.43         30.98         21.12         8.45           No. 37         68         51.47         23.52         8.82         16.17           No. 38         62         27.41         45.16         9.67         17.74           No. 39         52         40.38         13.46         21.15         25.00           No. 40         61         29.41         35.29         11.76         23.52           No. 41         49         42.85         18.36         16.32         22.44           No. 42         46         23.91         39.13         17.39         19.56           No. 43         43         37.20         25.58         23.25         13.95           No. 44         40         37.50         25.00         27.50         10.00           Median         52         37.50         25.00         21.12 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Group F (Under 100)           No. 34         99         46.46         20.20         22.22         11.11           No. 35         88         35.22         25.00         22.72         17.04           No. 36         71         39.43         30.98         21.12         8.45           No. 37         68         51.47         23.52         8.82         16.17           No. 38         62         27.41         45.16         9.67         17.74           No. 39         52         40.38         13.46         21.15         25.00           No. 40         51         29.41         35.29         11.76         23.52           No. 41         49         42.85         18.36         16.32         22.44           No. 42         46         23.91         39.13         17.39         19.56           No. 43         43         37.20         25.58         23.25         13.95           No. 44         40         37.50         25.00         27.50         10.00           Median         52         37.50         25.00         21.12         17.04           Tot. Med. Excl. 198         39.76         25.31         18.85						
No.         34         99         46.46         20.20         22.22         11.11           No.         35         88         35.22         25.00         22.72         17.04           No.         36         71         39.43         30.98         21.12         8.45           No.         37         68         51.47         23.52         8.82         16.17           No.         38         62         27.41         45.16         9.67         17.74           No.         39         52         40.38         13.46         21.15         25.00           No.         40         51         29.41         35.29         11.76         23.52           No.         41         49         42.85         18.36         16.32         22.44           No.         42         46         23.91         39.13         17.39         19.56           No.         43         37.20         25.58         23.25         18.95           No.         44         40         37.50         25.00         27.50         10.00           Median         52         37.50         25.00         21.12         17.04 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
No.         35         88         35.22         25.00         22.72         17.04           No.         36         71         39.43         30.98         21.12         8.45           No.         37         68         51.47         23.52         8.82         16.17           No.         38         62         27.41         45.16         9.67         17.74           No.         40         51         29.41         35.29         11.76         28.52           No.         40         51         29.41         35.29         11.76         28.52           No.         41         49         42.85         18.36         16.32         22.44           No.         42         46         23.91         39.13         17.39         19.56           No.         43         37.20         25.58         23.25         13.95           No.         44         40         37.50         25.00         27.50         10.00           Median         52         37.50         25.00         21.12         17.04           Tot. Med. Excl.         198         39.76         25.31         18.85         15.75           Chic.<	No. 34	99			22.22	11.11
No. 36 71 39.43 30.98 21.12 8.45 No. 37 68 51.47 23.52 8.82 16.17 No. 38 62 27.41 45.16 9.67 17.74 No. 39 52 40.38 13.46 21.15 25.00 No. 40 51 29.41 35.29 11.76 23.52 No. 41 49 42.85 18.36 16.32 22.44 No. 42 46 23.91 39.13 17.39 19.56 No. 42 46 23.91 39.13 17.39 19.56 No. 43 43 37.20 25.58 23.25 13.95 No. 44 40 37.50 25.00 27.50 10.00 Median 52 37.50 25.00 27.50 10.00 Median 52 37.50 25.00 21.12 17.04 Tot. Med. Excl. 198 39.76 25.31 18.85 15.75 Chic.						
No. 37     68     51.47     23.52     8.82     16.17       No. 38     62     27.41     45.16     9.67     17.74       No. 39     52     40.38     13.46     21.15     25.00       No. 40     51     29.41     35.29     11.76     23.52       No. 41     49     42.85     18.36     16.32     22.44       No. 42     46     23.91     39.13     17.39     19.56       No. 43     43     37.20     25.58     23.25     13.95       No. 44     40     37.50     25.00     27.50     10.00       Median     52     37.50     25.00     21.12     17.04       Tot. Med. Excl. 198     39.76     25.31     18.85     15.75       Chic.       Tot. Med. Incl. 222     40.21     25.44     18.62     15.25						
No.         38         62         27.41         45.16         9.67         17.74           No.         39         52         40.38         13.46         21.15         25.00           No.         40         51         29.41         35.29         11.76         23.52           No.         41         49         42.85         18.36         16.32         22.44           No.         42         46         23.91         39.13         17.39         19.56           No.         43         37.20         25.58         23.25         13.95           No.         44         40         37.50         25.00         27.50         10.00           Median         52         37.50         25.00         21.12         17.04           Tot. Med. Excl.         198         39.76         25.31         18.85         15.75           Chic.           Tot. Med. Incl.         222         40.21         25.44         18.62         15.25						
No. 40     51     29.41     35.29     11.76     28.52       No. 41     49     42.85     18.36     16.32     22.44       No. 42     46     23.91     39.13     17.39     19.56       No. 43     43     37.20     25.58     23.25     13.95       No. 44     40     37.50     25.00     27.50     10.00       Median     52     37.50     25.00     21.12     17.04       Tot. Med. Excl. 198     39.76     25.31     18.85     15.75       Chic.       Tot. Med. Incl. 222     40.21     25.44     18.62     15.25	No. 38				9.67	17.74
No. 41     49     42.85     18.36     16.32     22.44       No. 42     46     23.91     39.13     17.39     19.56       No. 43     48     37.20     25.58     23.25     18.95       No. 44     40     37.50     25.00     27.50     10.00       Median     52     37.50     25.00     21.12     17.04       Tot. Med. Excl. 198     39.76     25.31     18.85     15.75       Chic.       Tot. Med. Incl. 222     40.21     25.44     18.62     15.25	No. 39	52	40.38	13.46	21.15	
No. 42     46     23.91     39.18     17.39     19.56       No. 43     43     37.20     25.58     23.25     13.95       No. 44     40     37.50     25.00     27.50     10.00       Median     52     37.50     25.00     21.12     17.04       Tot. Med. Excl. 198     39.76     25.31     18.85     15.75       Chic.       Tot. Med. Incl. 222     40.21     25.44     18.62     15.25		51	29.41	35.29		
No. 43     48     37.20     25.58     23.25     13.95       No. 44     40     37.50     25.00     27.50     10.00       Median     52     37.50     25.00     21.12     17.04       Tot. Med. Excl. 198     39.76     25.31     18.85     15.75       Chic.       Tot. Med. Incl. 222     40.21     25.44     18.62     15.25		49	42.85	18.36		
No.         44         40         37.50         25.00         27.50         10.00           Median         52         37.50         25.00         21.12         17.04           Tot. Med. Excl.         198         39.76         25.31         18.85         15.75           Chic.         70t.         10t.         10t.						
Median         52         37.50         25.00         21.12         17.04           Tot. Med. Excl. 198         39.76         25.31         18.85         15.75         Chie.           Tot. Med. Incl. 222         40.21         25.44         18.62         15.25						
Tot. Med. Excl. 198     39.76     25.31     18.85     15.75       Chic.       Tot. Med. Incl. 222     40.21     25.44     18.62     15.25						
Chic.         Tot. Med. Incl. 222         40.21         25.44         18.62         15.25			37.50	25.00		
Tot. Med. Incl. 222 40.21 25.44 18.62 15.25	Tot. Med. Excl	. 198	39.76	25.31	18.85	
						Chic.
	Tot. Med. Incl	. 222	40.21	25.44	18.62	15.25
						Chic.

Because of possible, extreme variations which may be found within individual schools, it is important to tabulate results in terms of median percentages. The median, in this instance, signifies that there are as many schools which have Freshman enrollments above a certain named percentage as there are schools which have enrollments below this named percentage. The classification of schools used is similar to that found in the United States Bureau

of Education Bulletin, 1915, No. 6, on page 35. Table II presents results in detail for different schools relative to groups of different sizes: schools having over 1,000 pupils: 501-1000; 301-500; 201-300; 101-200; and under 100. Some of the groups here presented are, of course, too small from which to draw final conclusions. But the group classification is used partly for the purpose of emphasizing a valuable method of procedure, as well as for the purpose of ascertaining results. This detailed presentation is given in order that either individual schools or groups may be compared with one another.

The median enrollment for the schools represented in table II, not including the Chicago schools is 198 pupils. Jessup and Coffman included 104 Illinois high schools in their study of the North Central schools. They found the median to be 143 pupils for their group studied, as is indicated on page 74, of their report. (Reprint 13th yearbook Nat. Soc. for the Study of Education). The 1915 Bulletin, already referred to, reads, on page 37, that the school with an enrollment of 101-200 is the size of school most frequent in every one of the 15 states included. The median enrollment for the E group (101-200) is 155 pupils, in the present investigation.

The median percentage of distribution for the Freshman year, for the whole number of schools, excluding the four Chicago high schools, is 39.76; for the Sophomore, 25.31; for the Junior, 18.85; and for the Senior year 15.75. Including only the four year high school pupils in four of the Chicago schools, the total median percentages are as follows: 40.21 Freshmen; 25.44 Sopho-

mores; 18.62 Juniors; and 15.25 Seniors.

It is possible in Table II to make a great variety of comparisons. For illustration the median percentages for the Freshman year of groups C and D are practically the same, namely 40.82 and 40.36. The percentage of

TABLE III, PROPORTIONATE DISTRIBUTION OF BOYS AND GIRLS IN CLASSES.

	TOP TOTAL	Fres	Freshman.	Roph	Sophomore.	Junior	ior.	Senior	.10r.
		B.	G.	B.	G.	B.	<del>ئ</del>	B.	Ģ.
				Group A	(Over 1000	) pupils).			
0. A.		53.67	46.32	46.36	53.63	33.05	66.94	32.32	67.67
o. B.	-	46.00	54.00	51.47	48.52	38.50	61.50	33.03	96.99
o. C.		40.39	59.60	39.67	60.32	39.01	86.09	29.72	70.27
Median	1209	46.00	54.00	46.36	. 53,63	38.50	61.50	32.32	67.67
				Group	B (501-1000	(000)			
0.	883	48.29	51.70	48.88	51.11	47.54	52.45	49.20	50.79
No. 2	819	50.00	50.00	55.24	44.75	48.80	51.19	44.09	55.90
	509	47.93	52.06	45.36	54.63	48.62	51.37	54.12	45.87
Median	819	48.29	51.70	48.88	51.11	48.62	51.37	49.20	50.79
				Group	C (301	-500).			
No. 4	462	35.22	64.77	36.80	63.19	45.67	54.32	31.14	68.85
70		45.20	54.79	40.62	59.37	39.79	60.20	48.78	51.21
6		43.50	56.49	39.75	60.24	47.05	52.94	34.17	65.82
7		50.33	49.66	46.28	53.71	40.00	00.09	35.55	64.44
α		52.28	47.71	45.05	54.94	40.00	59.99	48.98	51.01
6		46.40	53.60	37.66	62.33	47.72	52.27	36.92	63.04
10		48.14	51.85	42.85	57.14	31.16	68.83	51.16	48.83
111		48.06	51.93	38.66	61.33	41.42	58.57	e33.33	99.99
12		40.57	59.42	30.00	70.00	55.38	44.61	30.76	69.23
Median	363	46.40	53.60	39.75	60.24	41.42	58.51	35.55	64.44
				Group	D (201-300).	300).		6	
		49.16	50.83	47.14	52.85	45.71	54.28	54.05	45.94
	-	61.94	38.05	40.00	60.00	33.33	99.99	30.76	69.23
		49.62	50.37	44.92	55.07	35.89	64.10	34.37	65.62
		46.32	53.67	32.87	67.12	64.51	35.48	54.83	45.16
		54.63	45.36	45.94	54.05	52.17	47.82	39.53	60.46
18	248	46.00	54.00	38.09	61.90	36.95	63.04	43.58	56.41
		37 93	62.06	46.87	53.12	50.00	50.00	30.61	69.38
		45.71	54.28	39.34	60.65	53.84	46.15	49.01	86.09
		23.33	46.66	27 45	72.54	22.58	77.41	43.58	56.41
No 29		35.52	64 47	28.30	71.69	27.02	72.97	34.09	65.90

TABLE III PROPORTIONATE DISTRIBUTION OF BOYS AND GIRLS IN CLASSES. Continued

	TOT TOT.	Fres	Freshman.	Soph	Sophomore.	Jus	Junior.	Senior		
		B.	G.	B.	G.	B.	G.	B.	G.	
				Group	p E (101-	-200)				
	186	47.56	52.43	45.61	54.38	30.00	70.00	70.58	29.41	
	181	54.92	45.07	53.19	46.80	45.45	54.54	50.00	50.00	
	171	43.20	56.79	35.48	64.51	40.62	59.37	55.55	44.44	3
	187	31.11	68.88	49.09	50.90	31.42	68.57	62.50	37.50	
	162	46.42	53.57	37.77	62.22	48.14	51.85	41.17	58.82	
	177	44 77	55.22	38.46	61.53	34.48	65.51	35.00	65.00	
	154	60.46	39.53	52.38	47.61	46.34	53.65	39.28	60.71	
	147	37.77	62.22	51.16	48.83	56.09	43.90	38.88	61.11	
	196	48 78	51.21	41.17	58.85	36.41	65.38	40.00	00.09	
	151	14.28	85.71	52.00	48.00	89.13	98.09	29.16	70.83	
	111	58.06	41.93	65.21	34.78	35.71	64.28	24.13	75.86	
Median	155	46.42	53.57	49.09	50.90	39.13	98.09	40.00	00.09	
				Group	F (Under	100).	-			
No 84		41.30	58.69	50.00	50.00	31.81	68.18	45.45	54.54	
No.		54.83	45.16	36.36	63.63	50.00	50.00	26.66	73.33	
No. 36.		60.71	39.28	50.00	50.00	26.66	73.33	33.33	99.99	
No 27		34.28	65.71	50.50	50.00	33.33	99.99	18.18	81.81	
No. 38		35.29	64.70	64.28	35.71	99.99	33.33	36.36	63.63	
No 20		19.04	80.95	57.14	42.85	63.63	36.36	38.46	61.53	
No An	2 10	40.00	60.00	61.11	38.88	20.00	20.00	33.33	99.99	
No Al		42.85	57.14	33.33	66.68	37.50	62.50	27.27	72.72	
No 49		45.45	54.54	44.44	55.55	50.00	20.00	99.99	33.33	
No 43		37.50	62.50	36.36	63.63	40.00	60.00	33.33	86.66	
Madian		40.65	59.34	50.00	20.00	45.00	55.00	33.33	99.99	
Tot me		46.32	53.67	44.92	55.07	41.42	58.57	38.88	61.11	Exc. Chi.
Tot me		46.16	53.83	44.98	55.00	40.31	59.68	37.70	62.28	и

retention is better for group D than for group C from the first to the second year of high school. On the other hand, group C shows the better retention from the

second to the third year.

The median percentage of Freshmen in the F group is 2.94 higher than that for the E group. But the percentage of retention between the Freshmen and Sophomore years is proportionately better for the E group than that for the F group, as is also true of the E group between the Junior and Senior years respectively. Speaking of the two groups E and F as a whole, then it may be seen that the percentage of retention is higher for the E than for the F group.

The median percentages for the four years in the A and B groups are respectively: 44.46; 26.71; 15.87; 14.20; and 38.11; 25.48; 20.51; 15.50. The B group shows a better percentage of retention of pupils between the Freshman and Sophomore, and between the Sophomore and Junior years than does the A group, but a poorer retention between the Junior and Senior years.

The median percentages for different groups of schools may be compared with one another in diagram 2. Also comparisons may be made between any individual schools and the group medians. Each of the separate graphs for the groups indicate a decrease of pupils from the Freshman to the Sophomore year which is comparatively large. The group of schools 101-200 shows the smallest decrease. By comparing school No. 45 with the 101-200 group it may be seen that the retention between the first two years is better in school 45, while the retention from the Sophomore to the Junior years is the better for group 101-200. Again the retention between the Freshman and Sophomore years is better in case of school No. 46 than is the case in the 201-300 group, as is also true between the Sophomore and Junior years. Schools 45 and 46 are not included within the total fortyfour schools in Table II.

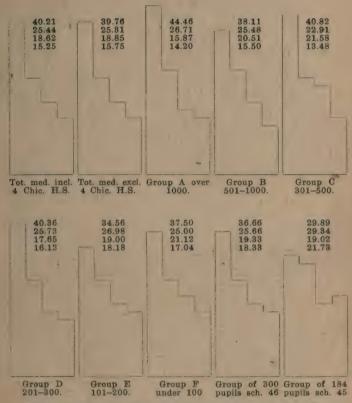


Diagram 2, graphs showing the median percentages of distribution for the groups in table II; also the distribution of several individual schools.

The percentage of the proportionate distribution of boys and girls in different years of the high school is indicated in Table III. Forty-three out of the previously mentioned forty-four schools are here included. One of the omitted Chicago schools had only boys enrolled, the other school did not report boys and girls

separately.

By reading the medians both for the separate groups, and also for the total number of schools not including the three Chicago schools it is obvious that the proportionate number of girls is higher than that of boys, in all the years, except in the case of the Sophomore year of the F group where the number of boys and girls

is equal.

In terms of the total medians, excluding the three Chicago high schools, 46.32 percent of the pupils in the Freshman year were boys, and 53.67 girls; in the Sophomore year 44.92 were boys, and 55.07 percent girls; in the Junior year 41.42 percent boys, 58.57 percent girls; in the Senior year 38.88 percent boys, and 61.11 percent girls. Including the three Chicago high schools, the total median percentages were, 46.16 boys, 53.83 girls in the Freshman; 44.98 boys and 55.00 girls in the Sophomore; 40.31 boys, and 59.68 girls in the Junior; 37.70 boys and

62.28 girls in the Senior year.

The number of schools included in group B is, of course, only three. But the results show that with the exception of the Sophomore year in group E, the proportionate number of boys is higher in group B. for all the years of the high school, than in any of the other groups. Its median percentage of Freshman boys reads 48.29: Sophomores 48.88: Junior 48.62: Senior 49.20. The median percentages for the Senior years of groups A. C and F are somewhat alike. In group A, 32.32 percent are boys, 67.67, girls; in Group C, 35.55 boys, and 64.44 girls; in group F, 33.33 boys, and 66.66 girls. In these three groups, approximately two-thirds of the pupils in the Senior years are girls. In the other three of the six groups, namely B, D and E, the proportion of boys in the Senior years is somewhat larger than is the case in the first three groups mentioned, all being 40 percent or above.

The range of variation in the proportionate median percentage of boys and girls among the different groups in the Freshman year is from 40.65 in group F, to 48.29 in group B for boys; in the Sophomore year from 39.67 in group D to 50.00 in group F; in the Junior year from 38.50 in group A to 48.62 in group B; in the Senior year from 32.32 in group A to 49.20 in group B. The corresponding variations for the percentage of girls in the different years of the high school may be found by referring to Table III. The highest percentage of girls found in any one year is in the Senior year, in group A, namely 67.67. The lowest in any year is found in the

Sophomore year in group F, namely, 50.00.

Different individual schools may be compared within the same groups, or in different groups from this same table, or compared with the total median in case any one desires to do so. By adding the total medians excluding the Chicago schools for the Freshman and Sophomore years the proportionate percentage of distribution for boys is 45.62, and for girls 54.37; in case of the Junior and Senior years combined it is 40.15 for the boys, and 59.84 for the girls. School No. II has for the combined Freshman and Sophomore years, 43.36 percent boys and 56.63 girls; and for the combined Junior and Senior years 37.37 for the boys, and 62.61 for the girls. The proportionate percentage of boys is lower for the first two years in school No. II than the total median for all the schools, as is also true in the combined Junior and Senior years.

Table IV is a presentation of the ages of pupils in schools according to groups. In terms of median percentages excluding the four Chicago schools, 5.32 percent of the pupils are under 14 years of age, and including these same four schools 5.86 percent. Excluding the four Chicago high schools 82.14 percent are within the ages 14-15, 15-16, 16-17, 17-18, and including these same four schools 81.56 are within these same ages.

TABLE IV. PERCENTAGES OF DISTRIBUTION BY AGES.

School	Enr.	12-14	14-15	15-16	16-17	17-18	18-19	Over 19
			Group	ıp A. (Over	1000	pupils).		
A	1639	7.31	20.92	24.95	22.82	15.07	5.97	2.92
i d	1209	6.78	19.93	22.82	22.82	15.21	8.93	3.47
ic	1107	0 77	27.15	22.13	18.79	13.03	6.85	2.25
; c	1028	8 04	20 03	23.05	17.80	15.07	8.46	6.61
Median	1203	8.12	20.47	22.93	20.80	15.07	7.65	3.19
			)	Group B.	(501-1000			
1.	8883	5.09	18.91	24.68	24.00	14.94	9.39	2.94
2	819	7.44	22.95	25.39	20.75	15.01	6.83	1.58
i 00	509	7.26	22.20	21.61	23.96	15.91	7.07	1.96
Median	819	7.26	22.20	24.68	23.96	15.01	7.07	1.96
-				Group C.	(301-500)	•		
	462	4.76	25.10	18.61	25.75	13.85	9.95	1.94
	454	9.91	24.88	24.44	19.60	13.43	7.70	00.
No. 6.	384	5.46	22.91	26.04	22.39	15.36	6.25	1.56
	365	9.31	30.13	23.83	16.71	11.50	4.65	3.83
	363	3.30	14.04	25.61	23.69	18.18	10.46	4.68
	336	9.83	25.59	26.19	18.75	12.50	6.25	68.
	332	3.91	12.65	24.39	25.60	21.38	9.63	2.40
. 11.	319	5.01	19.43	14.10	17.55	15.97	18.49	9.40
	312	7.37	18.91	.20.83	27.88	13.14	6.41	5.44
	363	5.46	22.91	24.39	22.39	13.85	7.70	2.40
		- Control of the Cont		Group D.	(201-300)			
	297	8.08	19.52	30.97	19.86	14.14	6.73	79.
	290	7.58	28.27	21.37	23.44	5.51	.34	13.44
	275	7.27	26.18	26.90	20.00	11.63	2.90	5.09
	271	7.01	18.08	23.98	23.04	14.39	11.07	2.21
	260	6.53	23.46	27.69	22.69	11.92	5.38	2.30
	248	3.62	20.96	25.80	21.77	18.54	8.46	.80
	244	1.63	21.31	19.67	25.40	15.16	12.70	4.09
	234	8.11	18.37	27.35	23.07	18.37	3.84	.85
. 21.	211	, 1.42	14.21	30.33	26.06	14.69	1.37	1.89
No. 22.	210	2.85	12.38	24.28	23.80	24.76	8.09	3.80
	P 20	5 23	0000	20 20	200	7 7 7 7	F 7 4 2	200

TABLE IV. PERCENTAGES OF DISTRIBUTION BY AGES .- Continued

	P.HI.	12-14	14-15	15-16	16-17	17-18	18-19	Over 18	
				Group E.	(101-200).				
	186	00.	8.60	18.81	27.41	25.80	13.44	5.91	
	181	6.07	20.99	27.07	19.88	16.02	8.28	1.65	
	171	20.00	16.95	19.29	21.63	22.80	8.18	5.26	
	167	3.59	17.96	29.94	24.55	15.56	7.78	.59	
	162	1.23	17.90	20.98	19.75	24.07	12.96	3.08	
	155	6.45	22.58	23.87	21.93	17.41	6.45	1.29	
	154	5.19	12.98	19.48	25.97	24.02	10.38	1.94	
	147	4.08	10.88	19.72	33.33	17.68	8.84	5.44	
	126	3.96	15.87	22.22	26.19	19.04	9.52	3.17	
	121	16.52	21.48	16.52	18.18	16.52	10.74	00.	
	111	2.70	17.11	18.01	34.23	18.91	8.10	06.	
Median	155	4.08	17.11	19.72	34.55	18.91	8.84	1.94	
			-	Group F. (	(Under 100)	-			
	66	2.02	19.19	17.17	31.31	17.17	7.07	90.9	
	00	11.36	19.31	28.40	21.58	14.77	3.40	1.13	
	71	8.45	21.12	19.71	26.76	14.08	8.45	1.40	
	68	5.88	5.88	33.82	27.94	8.82	11.76	5.88	
	62	4.83	19.6	25.80	25.80	12.90	19.35	1.61	
	52	7.69	13.46	36.53	15.38	11.53	15.38	00.	
No. 40.	51	3.92	19.60	19.60	27.45	17.64	5.88	5.88	
	49	00.	18.36	18.36	30.61	20.40	12.24	00.	
	46	2.17	15.21	23.91	21.73	15.21	10.86	10.86	
	43	16.27	13.95	23.25	20.93	18.60	6.97	00.	
	40	2.00	7.50	45.00	25.00	17.50	00.	00.	
Median	52	5.00	15.21	23.91	25.80	15.21	8.45	1.40	
Tot. Med.	198	5.32	18.91	23.94	23.56	15.73	8.23	1.95	Ex. Chic.
Tot. Med.	222	5.86	19.25	23.88	23.15	15.28	8.23	2.23	Inc. Chic.

In groups A, B, C, and D over 20 percent respectively are 14-15 years of age; in groups E and F respectively the percentages are 17.11 and 15.21. By comparing the median percentages for groups E and F with the other groups, it may be seen that the pupils are shown to be older in the smaller schools when all of the pupils are taken into consideration. There is a little variation from this generalization to be found in case of the pupils over 19 in the E and F groups where the number of pupils involved is of course small. On the other hand under the 12-14 year-olds it will be seen that 4.08 percent represents the median for group E, while those for groups D, C, B, and A are respectively: 6.77, 5.46, 7.26, and 8.12.

The mode, or the age at which the greatest percentage of pupils were enrolled was in group A, 15-16 years; in group B, 15-16; in group C 15-16, and in group D, 15-16; but in groups E and F respectively 16-17 years of age.

The percentage of distribution by ages for school No. I is 5.09 percent under 14 years of age; 18.91, 14-15; 24.68, 15-16; 24.00, 16-17; 14.94, 17-18; and 12.33 percent over 18 years of age. This distribution may be compared with the total median in order to discover variations or agreements. In school No. 1, 82.53 percent of the pupils are within the years of 14-15, 15-16, 16-17, 17-18. It was shown earlier that the median for the forty-four schools is 82.14 percent. The percentages for these same four years of high school for all of the groups compare as follows with school No. 1: group A, 79.27; group B, 85.85; group C, 83.54; group D, 84.28; group E, 80.29; and group F, 80.13.

The variations between schools within the same group, or between schools in different groups may be ascertained by a detailed study of Table IV. For example school No. 7 has the highest percentage of 14-15 year-

olds, out of the total list of schools presented, namely 30.13 percent. School No. 37 has the lowest of any individual school, namely 5.88. The median percentage for the 15-16 year-olds in group D is 26.35. The highest percentage of 15-16 year-olds for any single school presented in the list is 45.00 in case of school No. 44, which is 21.09 percent higher than that for group F. The lowest is 14.10 in case of school No. 11, which is 10.29 percent lower than that for group C to which school No. 77 belongs.

The results of Table IV show that four-fifths or more of the pupils in the high schools are of normal age 14-18. The age at which the largest number are enrolled is 15-16 years in the larger groups, and 16-17 in the two smaller groups. But there are a sufficient number of pupils enrolled both below and above the normal age 14-18 to require definite and systematic treatment and consideration, in the administration and organization of the high school.

### PERMANENT WITHDRAWALS IN THE HIGH SCHOOL

Table V, of blank III includes the permanent with-drawal-pupils in twenty-one different high schools. Four of these schools had enrollments under 100; seven of them, between 101-200; three of them between 201-300; four of them between 301-500; three of them, between 501-1,000. The summary is made in the form of the original blank sent out, according to both ages, and years or classes.

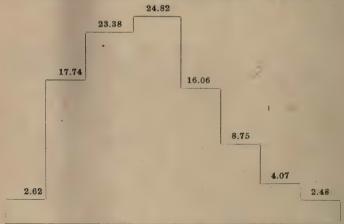
When this table is read with reference to years or classes, it shows that a total of about 51 per cent of the permanent withdrawals occurred by the end of the Freshman year, of which number 24.58 percent are boys and 26.13 percent, girls. About 77 percent of all the permanent withdrawals occurred by the end of the first two years.

BLANK NO. III, PERMANENT WITHDRAWALS BY YEARS AND AGES, 1913-1914.

	Fre	sh.	So	ph.	Ju	nior	Senio	r Tot.	No.	Percent
Ages	В.	-G.	В.	G.	B.	G.	В.	G. by	ages	by ages
12-13	1					-			1	1.11
13-14	11	В	1	1					21	2.51
14-15	56	70	11	11					148	17.74
15-16	63	63	24	31	9	5			195	23,38
16-17	44	53	31	30	20	26	1	2	207	24.82
17-18	17	17	19	37	12	17	9	6	134	16.06
18-19	9	5	10	5	10	9	12	13	73	8.75
19-20	2	2	4	2	6	5	7	6	34	4.07
20-21					5		2	2	9	1.07
21-22					1				1	0.11
22-23			1				1		2	0.23
23-24							_		_	
Over 2	4 2		2		2		2	1	9	1.07

Tot. No. by				***************************************					
yrs. 205 Per 24.58 by yrs	218 26.13 50.	103 12.35 71	117 14.02 26.8	7.79 7	62 7.43 1.22	34 4.07	30 3.59 7.66	834	

TABLE V.—A summary of twenty-one different high schools.



12-14 14-15 15-16 16-17 17-18 18-19 19-20 Over 20 Figure 1, distribution of withdrawals by ages in 21 schools.

The percentage of withdrawals during the Freshman and Sophomore years respectively is higher for girls than that for boys. During the last two years respectively, the percentage of withdrawals for boys is very little higher than for girls. It is very commonly stated that boys drop out of school in much larger numbers than girls. The group of people included in these twenty-one schools is not large enough to serve as the basis of any final conclusion. But it would be interesting to find out what the result as here shown with reference to the proportionate percentage of withdrawals for girls would be for much larger groups. However, it is seasonably safe to assume that the ordinary judgment rendered with reference to boys dropping out in so much greater numbers needs some modification. The usual judgment that boys drop out in much larger numbers is based upon the absolute number dropping out rather than upon the proportionate percentage of withdrawals based upon the actual enrollment of boys and girls. It cannot be argued from Table V that in general the percentage of girls withdrawing is higher than that for boys. But it is quite probable that the percentage for girls as compared with the withdrawals of boys in general is considerably lower than the usual judgments rendered upon the matter have led us to believe. Later on in this report it will be seen that the retention of girls in the Freshman classes of 1910-11 is somewhat higher than that for boys, as is indicated by the graphs.

Table VI is given in order that a few comparisons may be made between the total twenty-one high schools, and one group of seven schools with enrollments between 101-200, and also between two different individual high schools. The variation between the total of twenty-one high schools and the two respective individual schools in the Freshman year is from 50.71 to 51.12 and 60.36. It should be noted that these two individually tabulated

schools are already included in the twenty-one. It would be better if some school not included were used for comparison.

Table VI shows percent of permanent withdrawals by years or classes.

Schools	Withdrawals	Freshman	Sophomore	Junior	Senior
21 Different Schools 7 Schools (101-200 . School (C)	107	50.71 65.41 60.36 51.12	26.36 20.55 23.17 25.58	15.22 9.34 14.02 12.78	7.68 4.66 2.43 10.52

When table V is read with reference to permanent withdrawals by ages it will be noted that 23.38 percent occurred during the age 15-16; 24.82 during 16-17; 16.06 percent during 17-18; 8.75 percent during 18-19. The withdrawals for the two ages 15-16 and 16-17 are 48.2 percent of the total number for all the ages reported in the different blanks.

From figure 1 as well as from Table V it may be observed that in these schools tabulated the highest percentage of permanent withdrawals occurs within the age 16-17, and that the total number of withdrawals for the years 14-15 and 15-16, and the years 16-17 and 17-18 are about equal, namely 40.12 and 40.88 percents respectively.

There are a number of factors of course which are not taken into account in this investigation of withdrawals. The facts are not here known for instance as to how many of these permanent withdrawals may have entered other schools. The percentage however is perhaps small. Or again some of these pupils who are regarded as permanent withdrawals for any one single year may have reentered the high school later on, but again this number would probably be comparatively small. This investigation of the problem of withdrawals would have added meaning in case it were supplemented by a questionnaire on the causes of permanent withdrawals.

It is obvious that the permanent withdrawals or loss of pupils is very high for the Freshman and Sophomore years. It is a significant fact that over three-fourths of the permanent withdrawals occurred during the first two years of the high school. In the light of this fact is it not relevant to raise some problems of organization and administration? A detailed and accurate analysis of the causes of such a large number of withdrawals during the first years of the high school should be made. The work of the high school should be so organized as to lower the relatively high loss between the first and last two years of the high school.

## ENROLLMENTS AND FAILURES IN DIFFERENT SUBJECTS

Twenty-two schools reported on the item of enrollment and failure in high school subjects for the school year of 1913-1914. Two of them had enrollments from 501-1,000 pupils; four 301-500; three 201-300; eight 101-200; and five of them under 100 pupils. These different groups of schools did not have a sufficient number of pupils in them to warrant a detailed comparison of the different sized groups. Consequently the results are tabulated for the total number of schools combined.

The total number of enrollments in different subjects of all the schools was as follows: 5,454 in English work of the four years; 3,833 in all the Mathematics offered; 2,761 in Science; 2,241 in History; 1,948 in Latin; 1,448 in German; 167 in French; and 3,896 in all of so-called vocational work.

As may be seen from figure 2 and the above statement, English leads in enrollments. The reasons are too obvious to call for any discussion. One-fourth of all the enrollments are in English; about 18 per cent in Mathematics; about 13 in Science; about 10 in History; about 9 in Latin; about 7 in Modern Languages.

One very evident administrative problem, out of many

possible ones, suggests itself in the light of the percentage of failures. Latin for example has about 9 percent of the total enrollments in all of the schools. Yet its percentage of failures is consistently very much higher than any other except the subject of Mathematics. Is it primarily the purpose of the Latin teacher to weed out thus early in the educative process this large a percentage? Are the failures due to the fact that the subject does not function as it once did in the life of the pupil? Are the failures due to the fact that only certain temperaments are adapted to this study?

In the first place it may be observed, by referring to figure 3 that the percentage of failures in terms of averages, in the different subjects, reads as follows: 19 for Latin, and 17 for Mathematics, with 10 as the most frequent for the other subjects. These percentages are

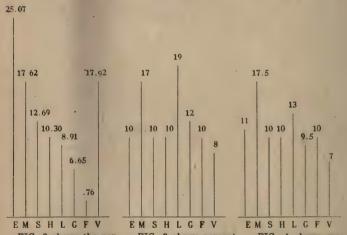
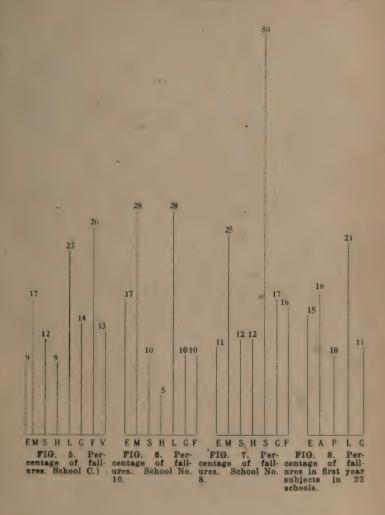


FIG. 2 shows the percentages of enrollments in different subjects in 22 high schools.

FIG. 3 shows percentage of failures in different subjects in terms of averages.

FIG. 4 shows median percentages of failures in different subjects.



expressed in whole numbers, using the next percent

higher whenever the fraction is over one-half.

Some persons may be interested to know that the percentage of failures for boys was correspondingly higher than for girls in nearly all of the subjects. For example, in Latin it was 8 percent higher; in English 6; in Mathematics 4. These average percentages of failures are based upon the total enrollments of boys and girls in

the different subjects.

According to the median percentage of failures for the different subjects, 13 percent of the pupils enrolled in Latin in these twenty-two schools, fail; 11 percent in English: 17.5 in Mathematics: and about 10 in the other academic subjects. The average percentage of failures in Latin was previously given as 19. The explanation of the difference between using averages and medians is easily made in terms of the schools which show a great variation. Several schools will be graphed later to make this clear. It is obvious from figure 4 that the mode, or the percentage of failures indicated most frequently among the different subjects, is about 10. From the various graphs, the results clearly show that either measured in terms of averages, or medians the highest percentage of failures is in the subjects of Latin and Mathematics.

Several practical administrative problems suggest themselves in the light of such results as are indicated by these graphs. While the number of cases here involved is comparatively small it is a representative list of certain groups of accredited schools. One of the first problems to be raised is, is it not practicable to attempt to standardize more definitely than at present our method of rating the standings of pupils? Is it not legitimate to ask for the definite grounds and bases for failing so many as 20 percent more or less of any single class? In case of a percentage of failures of more than

10 percent for example, why would it not be profitable to attempt to account for this percent, or even a lower percent of failures, through a frank discussion of the same, among a group of teachers representing the different departments, together with the principal? For example, to which of several possible factors is a certain high percentage of failures due: is it partly due to the fact that teachers are not adapting their material to the pupils' capacities? Or may it be due to the fact that subjects per se are simply too difficult, and a certain percent may always be expected to be incapable of mastering these certain subjects? Or may it be due to the fact that some subjects are better organized, and consequently more rigid standards are set up for pupils by teachers? May it sometimes be due to the fact that certain required subjects are more or less perfunctorily and disinterestingly carried on until the limit of endurance is reached both by the pupil and the teacher? In the light of the actual variations in practice with reference to failures is it not clear that some further work needs to be carried on through discussions and conferences within individual high schools relative to perspectives, and relative values of different subjects among teachers and principals?

Only a very few schools have been plotted to point out the great variations which do occur in practice. These variations may be seen by referring to figures 5 and 6 and 7. On what grounds for instance would one justify the disproportionate number of failures here represented? One school reports 23 percent in Latin, and 26 in French; another school 50 percent in Latin and 11 in English.

Certainly whenever the percentage of failures is above twenty percent it is fair to raise the question whether the avowed purpose of a school is the elimination of pupils. An explanation of any practice either consciously or aimlessly carried out by any teacher would further the interests of all concerned.

One further type of comparison ought to be carried out, namely the percentage of failures relative to subjects of the different years of high school work. Only one brief result is here shown in figure 8. The median percentages of failure for different so-called first year subjects are: 24 in Latin; 15 in English; 18 in Mathematics; 11 in German; 10 in Science (Physiography). Allowing for the fact that the first year Science is under trial, yet on what grounds can it be justified that two or three of the so-called more exact high school subjects will vary in a group of twenty-two schools from 24 percent to 18 and 10 percent of failures? In case of the German it might be argued that sometimes pupils take up German later than the first year of high school and therefore, the pupils being more mature, there would likely be fewer failures. But is this same answer applicable to the comparison here made between Mathematics and Science?

## Some Probable Causes of Failure in the High School

A blank similar to the one used for summarizing the results in Table VII was used in collecting this original data. Instructions were given that no pupil was to be counted more than once relative to the separate causes mentioned in the blank. Twenty-four high schools reporting and included in the summary, had total enrollments respectively as follows: six of them, under 100 pupils; eight, between 101 and 200; four, between 201 and 300; two, between 301 and 500; and four of them between 501 and 1,000. The total number of individual failures reported were approximately 2,000 pupils.

*BLANK NO. V, SOME PROBABLE CAUSES OF FAILURES. IN

TABLE VII.—SUMMARY OF TWENTY-FOUR DIFFERENT HIGH SCHOOL RELATIVE TO CAUSES OF FAILURES

Causes	Fresh.	Soph.	Jun.	Sen.	Tot. No	Percent
Carrying five subjects or more	20	31	31	24	106	5.36
Change of school	26	19	15	14	74	3.74
Irregular attendance	99	44	30	8	181	9.15
Poor teaching	25	Ŋ	16	6	56	2.83
Poor health	39	31	17	11	98	4.95
Lack of ability	311	183	56	15	565	28.59
Lack of effort	385	212	82	47	726	36.74
†Other reasons	105	45	16	1/4	170	8.60
TOTAL	1010	574	263	129	1976	99.96
PERCENT	51.11	29.04	13.30	6.5	2 99.97	

*Place the number of pupils under the cause you think most probable, not counting the same pupil more than once.

†Indicate any other reasons together with the number of pupils failing, in each year.

The results may be read in Table VII. It will be observed that lack of effort, and lack of ability were reported by principals, and teachers of these different high schools as the most prominent causal factors in the individual failures of pupils; almost 37 per cent in the case of lack of effort, and over 28 percent in the case of lack of ability, or a total of approximately 65 percent for the two causes combined. It would be possible to find out whether this table in its results represents the facts in general with reference to high school work relative to causes of failures. We have measures of such factors as lack of ability, poor health, and poor teaching which are reliable enough for gaining a body of important knowledge from any group of high schools. Some of these causes, of course, represent a complex and interrelation of different factors, as for example, lack of effort, and cannot be measured accurately without some difficulty. The replies included under "other reasons" were: back work, not prepared for high school, lack of interest, outside work, etc., making a total of 8,60 percent. Lack of ability, lack of effort, poor health, irregular attendance, and five subjects were those consistently

reported on by the majority of schools.

Reading Table VII in the columns according to years or classes, it may be seen that 80 percent of the total number of different failures for all the causes are found in the Freshman and Sophomore years combined, and that over 50 percent of all the failures due to all the mentioned causes occur in the Freshman year of the high school. Probably every one would expect the highest percentage of failures to occur in the Freshman year. The number of schools and pupils herein included is not large enough to justify any far-reaching general conclusion. But assuming that the results in the table indicate certain tendencies, might not the question be legitimately raised as to whether these combined causes actually do operate seven or eight times as strongly in the Freshman year as in the Senior year. And again a total of 494 failures in the Freshman and Sophomore years combined are attributed to lack of ability. While in the Junior and Senior years combined there are but 71 attributed to the same causal factor. In the light of our knowledge of the actual distribution of individual abilities of high school pupils the question might here be raised as to whether lack of ability has not been rather freely used to account for some failures which are at least partly due to other causes. Any one pupil's failure, of course, might be due to more than a single cause. Lack of effort, might be influenced considerably either by poor health or irregular attendance, for instance, since it is possible for it to be a composite resultant of several factors.

The medians for these different causes of failures in the twenty-four high schools have also been tabulated. The median is that percentage above and below which an equal number of schools are found. These are shown graphically in figure 9. The median percentage of failure for carrying five subjects is 5.27; for change of school 8.53: for irregular attendance 10.12; for poor teaching 7.97; for poor health 4.16; for lack of ability 31.50; for lack of effort 36.75. As will be observed the median percentages are very similar to those given in Table VII, in the instances of lack of effort, poor health, irregular attendance, and carrying five subjects. One reason for calling attention to the medians is that in Table VII only 2.83 percent of failures, for example, are recorded as due to poor teaching. In terms of

median percentages 7.97 are due to poor teaching.	Ex-
Lack of effort Lack of ability Poor health Poor teaching Irregular attendance Change of school Five subjects FIG. 9 represents the median percentages of failures relaticauses based upon the 24 schools in table VII.	36.75 31.60 4.16 7.97 10.12 8.53 5.27 ive to
Lack of effort Lack of ability Poor health Poor teaching Irregular attendance Change of school Five subjects FIG. 10 represents percentages of failures for different causeschool No. (C).	42.19 32.45 4.63 .77 10.81 2.31 3.55 ses in
Lack of effort Lack of ability Poor health Poor teaching Irregular attendance Change of school Five subjects FIG. 11 represents percentages of failures for different causehool No. 10.	31.15 18.83 2.89 7.97 18.83 2.17 4.92 ses in
Lack of effort Lack of ability Poor health Poor teaching Irregular attendance Change of school	30.55 38.88 3.70 10.18 4.63 3.70

FIG. 12 represents percentages of failures for different causes in school No. 18.

Five subjects

treme cases among the schools will make this difference. All twenty-four schools reported on the item of lack of effort, but only about one-half of the schools included the item of poor teaching, and the majority of the schools reporting on this item were those having the larger enrollments.

In figures 10, 11, and 12 three separate high schools have been arranged for the purpose of comparing them with one another relative to the causes of failures. The modes, or the greatest number of failures due to different causes are seen here again in all three schools to be those of lack of effort, and lack of ability. In the case of lack of effort the percentages vary from 30.55 to 31.15 and 42.19. In case of lack of ability the variation is from 18.83 to 32.45, and 38.88. Little variation occurs in case of the factor of change of school. Considerable variation obtains with reference to poor teaching as a

causal factor, ranging from .77 to 10.18 percent.

In an earlier table VII, it is shown that 2.83 percent of failures are due to poor teaching. According to the median percentage as shown in figure 11, 7.97 percent of failures are due to poor teaching. The median percentage of failures for the schools under 200 is 12.25, and for those over 200, 6.76. The facts here shown seem to indicate that the schools of the smaller group tend to evaluate failures more freely in terms of poor teaching than do the larger ones. But there were not so many schools reporting on this item for the smaller group under 200, as reported for the group over 200. Other medians were worked out for the ten schools having more than 200 pupils and the fourteen having under 200 pupils. The percentages for lack of effort were 35.57 and 36.75 respectively. Change of school 9.85 and 8.53 respectively.

In table VIII the failures in the three separately tabulated high schools are arranged by years or classes, also

the medians for 24 schools. It has been pointed out previously that more than 50 percent of the failures, took place in the Freshman year. Two of these individually tabulated schools show a percentage lower than 50 percent, namely 39.02 and 49.07. The third is higher than the percentage for the twenty-four high schools, namely 58.88. In each of these three schools over 80 percent of the total number of failures due to all the combined causes were found to be in the first two years. Assuming that these facts have been faithfully and correctly reported is not the proportionate number of failures for the first two years too high? One school reports no failures for the Senior year, and another practically none. Comparisons can also be made with the median percentages. The median result and that of school No. 18 are similar for the Junior year, 16.66 percent.

Table VIII shows percentages of failures in three different high schools by years or classes, and also me-

dian percentages in the 24 high schools.

School	No. of I	ailures	Fresh.	Soph.	Jun.	Sen
No. C		647	58.88	26.12	8.80	6,18
No. 10		138	39.92	42.75	18.11	
No. 18		108	49.07	33.33	16.66	.009
24 Schools		1976	42.75	30.11	16.66	7.54

The one general result shown in the tables and figures is that lack of effort and lack of ability were reported as the two largest causal factors in failures of pupils in high schools. By far the larger proportion of failures are reported for the first two years of high school work.

In the light of such results as these tabulated herein it would be helpful to high school administration to test and measure consistently and accurately, for a series of years, agreed upon by the principal and his teachers, the real causes of failures among high school pupils.

## MORTALITY WITHIN THE FRESHMAN CLASSES OF 1910-1911.

The retention of 1913-1914 graduates, based upon enrollment in the Freshmen classes of 1910-1911 is shown in table IX of blank No. VI, form B. The total number of graduates in these Freshman classes, in the seventeen high schools involved, was 1,190 pupils.

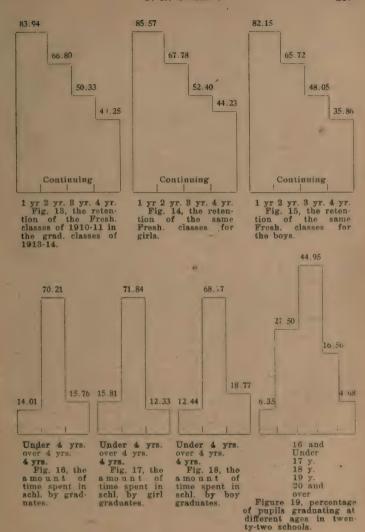
TABLE IX OF BLANK VI (FORM B) SHOWS THE MORTALITY IN FRESHMAN CLASS 1910-1911, (SEVENTEEN SCHOOLS).

		B.	G.	Tot.
II.	Number of persons in graduating class, 1914 Size of this class at the beginning of Freshman	290	352	642
	year	566	624	1190
III. IV.	Number in this original class continuing one year Number in this original class continuing two	465	534	999
V.	years	372	423	795
	years Number of above graduates in original Freshman	272	327	<b>59</b> 9
VI.	Class	203	276	479

Eighty-three and ninety-four hundredths percent of the original number in these classes continued in school for one year: 66.80 percent of this same group continued for two years: 50.33 percent, for three years: 40.25 percent of those who graduated were members of the original Freshman classes. The results are graphically shown for the total, as well as for boys and girls sep-

ately in figures 13, 14 and 15 respectively.

It will be noted that the total number of graduates reported from these schools in 1913-14 is 642. Out of this number of graduates, 479 pupils were the same persons who belonged to the original Freshman class. Some pupils may have taken more than four years to complete the course. Others may have completed the work in less than four years. But these two factors would just about equalize one another. Again some of the graduates out of the 642 have come from the smaller schools to the



larger high schools during the last year or two of the high school course.

The actual mortality or loss of pupils in the Freshman classes is shown to be 16.06 percent at the end of the first year; 33.20 percent at the end of the second; 49.67 at the end of the third; and 59.75 at graduation time. It is probable that the actual mortality is really a little lower than 60 percent. For some pupils considered in this single instance may have either re-entered school during the following year, or have entered some other high school.

Mortality is frequently estimated in general on the basis of mere distribution of pupils in the different years of the high school. This does, of course, suggest general tendencies with reference to the loss of pupils when very large groups are considered. But it is not really a true measure of mortality, because it fails to consider loss of pupils specifically with reference to the actual number who entered. The present results as shown in this investigation involve the same group of pupils from the Freshman year to the time of graduation.

## NUMBER OF YEARS SPENT IN HIGH SCHOOL BY GRADUATES

In part (A) of blank No. VI has been tabulated the number of years spent by different graduates in the high school. Twenty-two different high schools reported on this item, including 799 graduates. From table X it may be seen that 561 out of the total number of pupils graduated in four years; 36 in three years. There are just about as many who spend between 3 and 4 years as there are who spend between 4 and 5 years, namely 76 and 82 pupils.

TABLE X OF BLANK VI (FORM A) SHOWS NUMBER OF YEARS SPENT IN HIGH SCHOOL BY CLASSES, 1913-1914.

Time spent in school	Boys	Girls	Total	Time spent in school	Boys	Girls	Total
3 Years	16	20	36	4 1/2 to 5 Yrs.		17	30
B to 3 1/2 Yrs.	24	18	42	5 Years	16	20	36
3 1/2 to 4 Yrs.	°13	21	34	5 to 5 1/2 Yrs.	1	0	1
4 Years	293	268	561	5 1/2 to 6 Yrs.	0	1	1
4 to 4 1/2 Yrs.	48	4	52	6 Years	52	4	- 6

According to figure 16, 14.01 percent finish in less than four years, 15.76 in more than four years and 70.21 in the normal four years of time. From these results it is obvious that there are about as many pupils who completed the work in less than the normal time as there are who remain longer than the normal time of four years.

### AGE OF PUPILS AT GRADUATION TIME.

Twenty-seven schools reported on part (A) of blank No. VII which included the ages of pupils at the time of graduation. Out of a total of 803 pupils, 7 completed their high school work at 15 years of age; 44 at 16; 221 at 17; 361 at 18; 133 at 19; 27 at 20; 8 at 21, and 2 at 22 years of age. Figure 19 shows that 27.50 percent completed high school at 17 years of age; 44.95 percent at 18; and 16.56 percent at 19 years of age; 6.35 at 16 and under; while there were only 4.68 percent at 20 and above. Over one-fourth of the pupils which were reported graduated at 17 years of age, or almost three-fourths in the years 17 and 18 inclusive. A little less than one-half of the pupils graduate at the normal age of 18.

# ANTICIPATED AND ACTUAL LATER ACTIVITIES OF GRADUATES.

The returns received concerning later activities of pupils were too varied to prove very satisfactory. This was partly due to the weaknesses of the questionnaire, partly due to incomplete and unintelligible replies received. The following are some of the results organized from the reports of twenty-seven high schools:

1.	How	many	entered liberal arts courses 9
2.	How	many	entered normal schools?
8.			entered upon cadet teaching?
			entered industrial or commercial schools? 24
			entered commercial and business enterprises ? 108
			had decided to study law? 7
2.	How	many	had decided to study medicine? 6
3.			had decided to enter the ministry? 2
4			had decided to teach \ 98
D.	HOW	many	had made no definite decisions?

From the answers given to the first five questions, it will be seen that over 60 percent of the pupils included in the answers to the five questions continued educational work either in the form of study or teaching. These pupils were distributed over considerable territory. The few who reported were later to be found in attendance in 32 colleges or universities, 5 normal schools, and 3 business schools. Excluding those who entered commercial schools for further study and preparation, about 30 percent enter into business pursuits.

Of course, these facts are not so very enlightening in some respects because the two sets of questions are not wholly comparable. For instance, the second set of five questions asks nothing relative to the commercial interests. And again in neither set of answers have we any knowledge of what the other graduates out of the total number did, or did not do.

There is no very definite way of evaluating the fact that 69 had made no decision, since we do not know how many others of the group graduating had made some definite decision. But even this fact, together with the accidentally entered later activities is sufficient basis for calling attention to the need of some sort of definite and wise guidance of pupils while they are in high school, with reference to their later activities.

#### SUMMARY

No attempt has been made in the previous discussions to give an exhaustive list of conclusions based upon the results found. Some of the most significant and obvious results of the tabulations of the different sections of the part of the investigation entitled high school enrollment and related problems may be stated as follows:

1. The distribution of the total enrollment in fortyfour high schools was 40.33 percent in the Freshman year; 25.37 for the Sophomore; 18.99 for the Junior;

and 15.29 for the Senior.

2. The median distribution of enrollment for the 48 schools, including four Chicago high schools is 40.21 percent for the Freshman year; 25.44 for the Sophomore;

18.62 for the Junior; and 15.25 for the Senior.

3. The median for the proportionate distribution of boys and girls in classes is 46.16 percent boys in the Freshman year, and 53.83 percent girls; 44.98 boys, and 55.00 girls in the Sophomore; 40.31 boys, and 59.68 girls in the Junior; and 37.70 boys and 62.28 girls in the Senior. The proportionate number of girls is higher than of boys in all the years, with the greatest difference in the Senior year, approximately two-thirds being girls.

4. Based upon the median percentage of distribution by ages 81.56 percent of the pupils in the 48 high schools are within the ages, 14-18. So that about four-fifths of the pupils are within normal school age limits.

5. Over three-fourths of the permanent withdrawals of pupils occurred by the end of the Sophomore year; 50.71 percent of these were in the Freshman year and 26.37 in the Sophomore. In the Junior and Senior years the percents were 15.22 and 7.66 respectively.

6. The percentage of pupils enrolled in any one sub-

ject was highest in English, being about one-fourth of

the total number of enrollments in all subjects.

7. The highest percentage of failures found in the different high school subjects is in Mathematics and Latin. The percentage of failures in Mathematics is 17.5, and in Latin 13.

8. The most prominent causal factors in the individual failures of pupils were lack of effort and lack of ability, being 36.74 percent in the former, and 28.59 percent in the latter, or a total of approximately 65 percent for the two causes combined.

-9. About 80 percent of the total number of different failures for all the combined causes are registered in the Freshman, and Sophomore years combined, over 50 percent of these being found in the Freshman year.

10. The retention of the same pupils beginning in the Freshman class of 1910-11 and graduating in 1913-14 was 83.94 for the Freshman year; 66.80 for the Sophomore; 50.33 for the Junior, and 40.25 for the Senior.

11. About 70 percent of the graduates completed

the course in the regular four years' time.

12. Almost three-fourths of the pupils graduated in the years 17 and 18 inclusive, 27.50 percent at 17, and 44.95 percent at 18.

# SPELLING SCORES FOR FIFTY-FOUR ILLINOIS CITIES

### J. F. Bobbitt

The Spelling Test conducted by the Survey made use of the Buckingham list of words. The accompanying blank form gives this list, also the instructions for giving the tests and marking the papers. If instructions were followed, the test offers a reliable basis for comparison

of grade with grade and city with city.

It is the intention of those who summarized the results to let the accompanying charts tell their own story. The central tendency (median) is represented by the letter "M," the upper quartile by  $Q_3$ , and the lower quartile by  $Q_1$ . The shaded portion represents the middle fifty percent of cities reporting. The figures at the right of the name of the city represents the median score for that city.

Fifty-four cities sent in returns for all or part of the grades above the Second.

#### SPELLING TEST

If the janitor sweeps, he will raise a dust. Wait until the hour for recess to touch the button. Whose answer is ninety? Smoke was coming out of their chimney. Every afternoon the butcher gave the dog a piece of meat. One evening a carriage was stopping in front of my kitchen. I wear a number thirteen collar. Guess what made me sneeze. Send me a pair of leather shoes. I do not know, but I am almost sure they are mine. My uncle bought my cousin a pretty watch for forty dollars. The soldier dropped his sword. Jack had a whistle and also twelve nails. The ocean does not often freeze. You should speak to people whom you meet. It takes only a minute to pass through the gate and across the road. Did you ever hear a fairy laugh? The American Indian had a saucer without a cup. Neither a pear nor a peach was at the grocery store today. Cut up a whole onion with a handful of beans. My piano lesson was easy. The animal ran into the road and straight against a tree. I believe true friends like to be together instead of apart. Telephone me on Tuesday if the tobacco comes. The tailor sent a saucy telegram. Already the circus was beginning. Pigeons seem too beautiful to guarrel. I am truing to choose a towel. The chicken was fried in grease.

(Adapted from Buckingham: "Spelling Ability").

## INSTRUCTIONS FOR GIVING SPELLING TEST

Please read these instructions through before beginning to dictate the sentences:

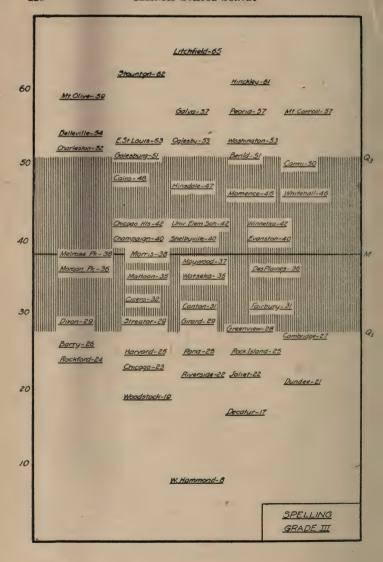
- 1. See that each sheet is headed with (a) the pupil's name; (b) his age; (c) the grade.
- 2. Dictate all the sentences to all the grades, beginning with the third, during one session, i. e., all either in the morning or in the afternoon of the same day.
- 3. In third and fourth grades, dictate in two periods, separated by at least a half hour, or by a recess period.
- 4. Each sentence may be dictated, either in whole or in part, as many times as may seem necessary to secure its complete understanding. This exercise is purely a test in spelling; it is not intended that pupils should be subjected to the added difficulty of an effort to recall the words dictated.
- 5. Offer no explanation of words or sentences. If the meaning is not clear, repeat the sentence in whole or in part.
  - 6. Do not ask the children to underline words nor otherwise

call their attention to the significant words of the sentences. Where possible so to conduct the matter, the pupils are not to know that it is a spelling test. To them it is but a dictation exercise.

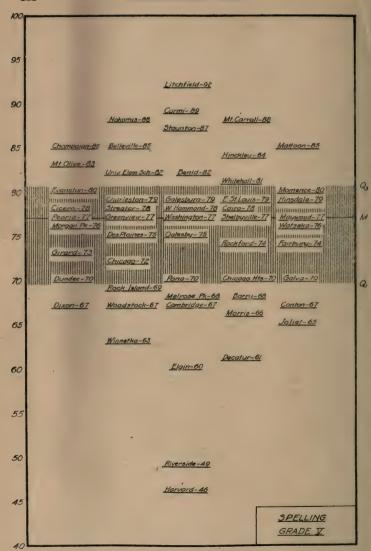
- 7. After the children have written the sentences, read them all through again and allow pupils to insert words or make other corrections.
- 8. Don't hurry; but keep things going fast enough that pupils will not have time to examine into what their neighbors are doing, or to give help to each other.
- 9. When third and fourth grades have written half the list, take up the papers and hold them until the second dictation. Then give them out again to be finished.
  - 10. Collect the papers as soon as the work is finished.

#### INSTRUCTIONS FOR MARKING AND RECORDING

- 1. In marking the papers, consider only the one hundred italicized words. Mistakes in the spelling of other words are not to be counted or noticed in any way.
  - 2. Underscore distinctly each misspelled word on each paper.
- 3. Set down on each paper the number spelled correctly. This is 100 minus the number misspelled.
  - 4. Assort all the papers of the entire school by ages.
- 5. Next assort the papers of each age-group by number of words spelled correctly; i.e., those having 96 to 100 words correct in one pile; 91 to 95, in a second, etc.
- 6. Counting the number of papers in each pile will give the numbers to be entered in Table I, "Record by Ages." This table will then show the number of pupils of each age on each of the levels.
- 7. After entering the numbers, add all the vertical age columns, and take a grand total. Also add all the horizontal series, and take a grand total. This grand total in each case should be the total number of pupils taking the test.
  - 8. Leave blank the spaces marked "Median."
- 9. To fill out Table II, "Record by Grades," distribute the total list of papers by grades; then distribute each grade-group by amount done, 96-100, 91-95, etc.; and proceed as with Table I.



-		
85		
	Litchfield-83	
	Mt Olive-82	
80		
	Staunton-78	
	<u>Nokomis-77</u>	
75	Univ. Elem-School-75	
	<u>Hinckley-74. Champaign-74.</u> <u>Belleville-73. Charleston-73.</u>	
	Galesburg-71 E. St Louis-71	
70	<u>Dixon - 70</u>	Q
	Girard - 69 Washington - 69 Peorio - 68	49
	Galya-68 Carmi-66 Greenview-66 Evanston-66 Oglesby-66	
05	Salva-66 Corm-66 Greenview-66 Evanston-66 Cglesby-66 Mattoon-65	
	Cicero-64 Cairo-63	
60	Hinsdale -6l - Maywood-6l	M
	Streator-59 Des Plaines-59 Watseka-59 Mt Carroll-59 Fairbury-59 Woodstock-58 Rockford-58 Morgan Pk-58 Cambridge-58	
	Chicago Hts- 57	
55		
	Morrio - 54 <u>Benid - 54</u> Chicago - 53	
	Melrose P1-52 Rono-52	R
50	W. Hammond-50 Shelpyville-50	
	Dundeo-49 Whitehall-49 Joliet-49 Canton-48	
	Rock Island - 47	
45	<u>Barry-45</u>	
	Elqin-43	
	and Guideline Control	
40		
	Decatur-39 Harraid-38	
	17071010-00	
35		
	Riverside-34	
	<u>SPELLING</u> GRADE IV	
30	GRADE II	



 $Q_3$ 

M

<u>Carmi-96</u> <u>Litahfield-97</u>

. Mt. Carroll-95

		Commence of commence				
			Bellevi	ille-92	Staunton-92	
	Hinckley-91		Greenview-9	2	Galva-91	
		Nakomis-90		Mattoon-90	Washing	ton-90
	III Maywood-89	Charleston-89	Univ. El Sch-89		Mt. Olive-89 0glasby	89
					Evansto	
	Streator-87	Cicero-87	Momence-87	Girard-87	Des Plaines -87 E St. Loui	5-87
4	Shelby	ville -86 HH Dur	ndee-86 mining	W Hommond	1-86 HH Fairbury-86	
		Morris-85	Chicago-85	BenId-85	Chambridge-85	
	Melrose Pk-84	Pana-84			Hilling Golesbur	
			Rockford-83	Chicago Hts-83	Cairo-83	
		Hinsdale-82		Woodstock-82	Morgan	PK-82

Conton-81

Winnetko-8/

Rock Island-81

Reoria-80

Barry-93

Decator- 78

Whitehall-76 Riverside-76

Joliet-74

Elgin-71

SPELLING GRADE VI

Harvard-56

100 -Litenfield-97 Mt. Carroll-96 Stounton-96 Delleville-96 Comi-96 95 Barry-93 Univ. Elem Sch-93 Mergan Pk-93 Mt. Olive-93 Champaign-92 Des Plaines-92 Meliose Pk-92 Peoria-92 ESt Louis-92 Charleston-9/ | Rockford-9/ | Watseka-9/ Benid-9/ H Dixon-9/ Maywood-91 Cicero-91 Streator-91 Evanston-91 Hinadole-90 Motroon-90 Galesburg-90 Notionis-90 .90 Momence-89 Washington-89 Oglesby-89 Cairo-89 Chicago Hts-88 Galva-88 Cambridge-88 Chicago-88 Shelbyville-87 Elgin-87 Rock Island-87 Fairbury-87 Morris-86 Hinckley-86 W. Hammond-86 Whitehall-86 Canton-86 Decatur-86 Winnetka-85 85 Greenview-84 Woodstock-83 Girard-83 Pana-82 Dundee-81 Joliet-81 Riverside-80 80 Harvard-78 SPELLING GRADE VII

Q3

#### M+ Olive-98

#### Litchfield-97 Carmi-97 Staunton-97

Galva-96 Barry-96 Nokomis-96 Qalesby-96 Evanston-96 Washington-96

Belleville-95 Hinsdale-95

Smelleville-95 Dixon-95 Momence-95 Morgan Fk-95 Benld-95

Maywood-94 Streator-94 Mattoon-94

Chicago-94 Mt. Carroli-94 Coiro-94 E 51 Lovis - 94

Charleston-93: Galesburg-93 — Cicero-93 — Greenview-93

Watseka-92 Riverside-92

Morris-92 Whitahall-92 Champagn-92 Des Plaines-92 Elgia-92

Quicago Itts-91 Pana-91 W Harrmond-91 Hirickley-91

Melrose Pk-91 Conton-91 Joliet-91 Girard-91 Combridge-91

Decatur-90 Peoria-90 Harvard-90 Fairbury-90

Dundee-89 Winnetka-89

Rock Island-88

Woodstock-87

SPELLING GRADE VIII

# ARITHMETIC SCORES FOR SEVEN ILLINOIS CITIES

#### J. F. Bobbitt

Courtis tests for use in the survey were secured for only a limited number of schools. These were tried out in seven school systems. In all cases the tests were given by teachers or principals of the cities reporting. They marked the papers and tabulated all of the results. These tabulated results were then sent in to the university from which the accompanying comparative tables were drawn up.

The results are grouped according to the four fundamental operations and by grades. The cities are arranged in the order of the average number of examples right. The percentage of accuracy is given in the second column. The figures in the right-hand column represent the percentage of pupils in each city having 100% accuracy and at the same time coming up to or exceeding the minimum standard for that grade in each of the operations. The standards in rights, percent of accuracy, and efficiency are those published by Mr. Courtis. It will be seen that the majority of the Illinois cities tested rank below these standards.

ADDITION.
Fourth Grade.

F OWI CIG	araue.		
	Rights	Percent of Accuracy	Efficiency
Jerseyville	. 0.0	64 32	2 3
STANDARD	. 3.2 i	- 54	6.0
Aurora Decatur Chicago Heights Canton	. 2.1 . 1.9 . 1.0	51 44 42 46	2 6 0 4
Morris			

#### Fifth Grade.

	Rights	Percent of Accuracy	Efficiency
Jerseyville	5.8	66	11
Morris	5.0	71	• ;
Charleston	3.9	55 54	4 1
Chicago Heights		55	8
STANDARD	8.6	<b>57</b> .	° 8.5
Decatur		57 52	2 2
Sixth	Grade.		
	Rights	Percent of Accuracy	Efficiency
Jerseyville	6.7	69	8
STANDARD	5.4	54	4.2
Canton	. 4.4	57	1
Charleston		63	0 1
Decatur		60	ō
Aurora	4.1	62	Ö
Morris	8.9	56	• •
Seventl	d Grade.		
	Rights	Percent of Accuracy	Efficiency
STANDARD	6.3	68	1.8
Jerseyville	5.9	78	Ü
Charleston		62	0
Charleston		66 55	0
Decatur		66	ő
Aurora	4.7	68	1
Morris	8.9	51	• •
Eighth	Grade.		
	Rights	Percent of Accuracy	Efficiency
Jerseyville		76	0
Chicago Heights	7.6	74	. 2

70

74 60 63

68

61

1.8

001

0

STANDARD ..... 7.1

Charleston ..... 6,6

 Canton
 5.4

 Decatur
 5.1

 Aurora
 4.9

Morris ..... 4.4

### II SUBTRACTION.

### Fourth Grade.

	Rights	Percent of Accuracy	Efficiency
Jerseyville	5.0	79	17
Charleston		72	3
Canton	3.8	55	1
STANDARD	3.5	58	9.3
Aurora	2.0	30	2
Chicago Heights		32	Ö
Decatur		33	1
Morris	• • • •	• •	• •
Fifth	Grade.		
	Rights	Percent of Accuracy	Efficiency
Jerseyville	7.0	88	11
STANDARD		72	6.9
Canton		70	7
Morris		59	
Charleston		63	5
Aurora		56	9
Chicago Heights		60	2 2
Decatur	2.7	53	2
Sixth	Grade.		
	Rights	Percent of Accuracy	Efficiency
Jerseyville	8.0	88	2
derseyville			
		80	7.4
STANDARD	7.3	80 73	7.4
	7.3		3
STANDARD Aurora Chicago Heights Canton	7.3 5.8 5.8 5.7	73 71 70	3 3 4
STANDARD Aurora Chicago Heights Canton Charleston	7.3 5.8 5.8 5.7 5.4	73 71 70 72	3
STANDARD Aurora Chicago Heights Canton Charleston Morris	7.3 5.8 5.8 5.7 5.4 5.1	73 71 70 72 61	3 3 4 2
STANDARD Aurora Chicago Heights Canton Charleston	7.3 5.8 5.8 5.7 5.4 5.1	73 71 70 72	3 3 4
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur	7.3 5.8 5.8 5.7 5.4 5.1	73 71 70 72 61	3 3 4 2
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur	7.3 5.8 5.8 5.7 5.4 5.1 4.5	73 71 70 72 61	3 3 4 2
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur	7.3 5.8 5.8 5.7 5.4 5.1 4.5 h Grade.	73 71 70 72 61 65	3 3 4 2
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur  Sevent	7.3 5.8 5.8 5.7 5.4 5.1 4.5 h Grade. Rights	73 71 70 72 61 65	3 3 4 2 0
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur  Sevent	7.3 5.8 5.8 5.7 5.4 5.1 4.5 h Grade. Rights 10.6 8.9 7.5	73 71 70 72 61 65 Percent of Accuracy 90 84 85	8 3 4 4 2 0 O
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur  Sevent  Jerseyville STANDARD Charleston Aurora	. 7.3 . 5.8 . 5.8 . 5.7 . 5.4 . 5.1 . 4.5 h Grade. Rights . 10.6 . 8.9 . 7.5	73 71 70 72 61 65 Percent of Accuracy 90 84 85 80	8 3 4 4 2
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur  Sevent  Jerseyville STANDARD Charleston Aurora Canton	7.3 5.8 5.8 5.7 5.4 5.1 4.5 h Grade. Rights 10.6 8.9 7.5 7.3	73 71 70 72 61 65 Percent of Accuracy 90 84 85 80 72	3 3 4 4 2 0 0 Efficiency 13 8.7 4 9 5
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur  Sevent  Jerseyville STANDARD Charleston Aurora Canton Chicago Heights	. 7.3 . 5.8 . 5.8 . 5.7 . 5.4 . 5.1 . 4.5 h Grade. Rights . 10.6 . 8.9 . 7.5 . 7.3 . 7.0 . 6.7	73 71 70 72 61 65 Percent of Accuracy 90 84 85 80 72 68	8 3 4 4 2
STANDARD Aurora Chicago Heights Canton Charleston Morris Decatur  Sevent  Jerseyville STANDARD Charleston Aurora Canton	. 7.3 . 5.8 . 5.8 . 5.7 . 5.4 . 5.1 . 4.5 h Grade. Rights . 10.6 . 8.9 . 7.5 . 7.3 . 7.0 . 6.7	73 71 70 72 61 65 Percent of Accuracy 90 84 85 80 72	3 3 4 4 2 0 0 Efficiency 13 8.7 4 9 5

### Eighth Grade.

Jerseyville     11.5     89     16       STANDARD     10.3     84     8.6       Chicago Heights     9.0     83     5       Charleston     8.7     83     2       Canton     8.0     80     6       Decatur     7.4     81     1		Rights	Percent of Accuracy	Efficiency
Chicago Heights     9.0     83     5       Charleston     8.7     83     2       Canton     8.0     80     6       Decatur     7.4     81     1	Jerseyville	.11.5	89	16
Charleston         8.7         83         2           Canton         8.0         80         6           Decatur         7.4         81         1	STANDARD	.10.3	84	8.6
Canton 8.0 80 6 Decatur 7.4 81 1				, 5
Decatur 7.4 81 1			00	2
				6
				1
Morris 7.2 79	Morris	. 7.2	79	
Aurora 6.9 75 1	Aurora	. 6.9	. 75	• • • 1

#### III

#### MULTIPLICATION.

### Fourth Grade.

	Rights	Percent of Accuracy	Efficiency
Jerseyville	4.6	72	13
STANDARD	2.8	5.7	7.0
Aurora		58	5
Canton		44	0
Charleston	1.6	42	4
Decatur		37	1
Chicago Heights			
Morris		• •	

## Fifth Grade.

	Rights	Percent of Accuracy	Efficiency
Jerseyville	. 6.1	78	5
Canton		70	5
Morris	. 4.6	68	
STANDARD	. 4.0	66	4.6
Aurora	. 3.5	64	3
Charleston		56	3
Decatur		54	1
Chicago Heights	. 1.8	89	1

### Sixth Grade.

	Rights	Percent of Accuracy	Efficiency
Jerseyville	8.7	82	9
Canton	5.9	70	14
STANDARD	5.8	74	4.5
Aurora		77	2
Charleston		71	2
Chicago Heights	. 4.2	62	0
Morris	3.9	60	
Decatur		80	1

236	ILLINOIS SCHOOL SURVI	EY	
	Seventh Grade.		
	Rights	Percent of Accuracy	Efficiency
Jerseyville		87	16
STANDARD	8.6	76	4.0
Charleston	6.6	79	1
Aurora		- 76	4
Canton	6.4	70 68	4 1
Decatur		78	1
Morris	5.1	62	
	Eighth Grade.		
	Rights	Percent of	Efficiency
Jerseyville		84	11
Chicago Heights		83	5
STANDARD	8.5	80	8.7
	· · · · · · · · · · · · · · · · · · ·	70	6
Charleston Aurora		77 74	6
Decatur		66	2
Morris	4.4	59	
	īV		
	DIVISION.		
	Fourth Grade.		
	Rights	Percent of Accuracy	Efficiency
Jerseyville	2.2	59	7
STANDARD	1.5	42	7.7.
Canton		47	2
Charleston		85	. 3
			::
Decatur	**********		0
Chicago Heights	*********	• •	
	Fifth Grade.		
	Rights	Percent of Accuracy	. Efficiency
Jerseyville	4.8	85	15
CALLET LALLED	3.7	69	8.5
Morris		51	8.5
Morris	3.0 2.9	51 60	9
Morris	3.0 2.9 2.5	51 60 61	9 2
Morris Canton Aurora	3.0 	51 60	9

### Sixth Grade.

	Rights	Percent of Accuracy	Efficience
Jerseyville	10.0	96	44
STANDARD	5.7	80	12.4
Canton		65	5
Morris	3.7	70	
Aurora	3.1	68	2
Charleston	3.1	72	7
Chicago Heights		82	2
Decatur		57	2

## Seventh Grade.

	Rights	Percent of Accuracy	Efficiency
Jerseyville	.12.8	98	45
STANDARD	. 6.7	83	12.0
Charleston	. 6.2	84 76	10
Chicago Heights	. 5.1	77 80	5
Decatur	. 4.5	78 66	2

## Eighth Grade.

	Rights	Percent of Accuracy	Efficiency
Jerseyville	.18.4	98	44
STANDARD	9.8	88	13.6
Canton		90	26
Chicago Heights	7.7	85	7
Charleston	. 6.4	85	6
Morris	. 4.8	88	
Decatur	. 4.6	78	1
Aurora		72	ü

## A STUDY OF SOME EXCEPTIONAL HIGH SCHOOL PUPILS IN ILLINOIS

### BY ELMER E. JONES

Professor of Education, Northwestern University

As a part of the co-operative School Survey conducted under the auspices of the State Teachers' Association of Illinois, an attempt was made to secure information concerning those high school students who have gained marked distinction in the high school course and who have graduated with honors. Of course, there are inherent difficulties in undertaking to study such a group collectively. In the first place, the high schools that responded to our requests vary in size from schools in which there are three or four instructors to those in which there are forty or fifty. It is obviously much easier for a student to gain distinction in a small school than a large one, and it is very probable that some of the students regarded as "distinguished" in the smaller schools would have received no honors in the larger schools. Another difficulty is that of equating the grades from the several schools. As yet we have no standard system of marking in our institutions of learning, either in the secondary schools or in the higher institutions. It thus becomes difficult to group these students, because we have no assurance that we are measuring the same thing, or that we are using the same standard with which to measure.

It is therefore quite evident that we cannot lay great stress upon the results of this study of the group as a whole. However, in the complete tabulations used, it is possible to see many varying circumstances among the individuals studied, which may be of some value, both to the teacher and pupil. It is certainly of very great im-

portance for us to know some of the underlying principles of habit and study among pupils in the high schools who are able to surpass their class-mates in learning the subject matter we undertake to teach them. It is hoped that this study may be the beginning of a complete investigation of high school students who have the qualities of intellectual leadership. At present enough stress is being placed upon the exceptional high school athlete. Colleges and universities have been known to use influence to bring to their ranks high school students who show distinction in athletics: but so far as I know no definite plan has been inaugurated whereby the expenses of brilliant high school students may be paid for a term of years while engaged in study for intellectual leadership. This, however, might result in greater returns to the state than the development of a large body of exrunners or jumpers or foot-ball players.

In order to secure the data for this study blanks were sent out to the various commissioned high schools of Illinois. These blanks were mailed to the principals or superintendents with instructions to select one or two students from the senior class who, because of their intellectual ability, easily excelled all other students. Blank I was to be filled out by the Principal or some one delegated by him. Blank II was to be filled out by the student, and it was suggested that he do so without any assistance from others, thus assuring the student's own

judgment in all questions on the blank.

The blanks were sent to all the commissioned high schools in Illinois. However, many high school Principals returned the blanks explaining that they could not be filled out for the reason that the graduating class had no one individual who was easily distinguishable in intellectual capacity. It was made quite clear in the directions sent out that only very exceptional students should be asked. This may account for the relatively

small number of returns from the high schools of Illinois. Furthermore, it may be safely assumed that in the judgment of the principal each student whose record we received represents a distinct intellectual type clearly above all other members of the graduating class.

The following blank forms were used:

#### BLANK I.

DIANK I.
(To be filled out by the principal or some one delegated by him.) Town or city
AVERAGE GRADES IN SUBJECTS BELOW HIGH SCHOOL.
Reading         Writing         Arithmetic         Language          Phys. Tr
AVERAGE GRADES OF SUBJECTS IN HIGH SCHOOL.
Languages: Latin
ADDITIONAL INFORMATION.
Home conditions of this student: Social standing of parents
Financial status Education of parents
Interest in education

# BLANK II. (1)

## (To be filled out by student.)

You have been selected by your instructors as one of the
best students in your class. You are thus honored in an achieve-
ment of which you may well be proud. We are making a careful
study of the boys and girls in Illinois who have gained dis-
tinction, and are asking you to answer a few questions con-
cerning yourself, in order that we may know more fully how
you have achieved your present success. Will you kindly fill
out the blank below with great care.
Full name
Home address
Name of High School
BirthplaceDate of birth
Nationality of parents
Occupation of parents
No. of brothers Sisters Your place in list
Do you live in town or country?
What year did you enter the elementary school?
What grade did you enter? Were you taught at home before entering the primary school? Did you
alin any grades? Which? Weer
skip any grades?
what prompted you to go to high schools
Year entering high school
Do you expect to enter college or university?Where
bo you expect to enter conege of university
Do you have a profession or vocation in mindWhat
······································
Have you received pay for outside work during your high school
course?How much time devoted to this work?
What advantages outside of the home and school have you had,
such as travel, libraries, museums, churches, theatres, etc.?
Are you a member of a church ? Name of church ?
What active work have you done in the church
What is your height?weightcolor of hair
color of eyesstate of health
Any physical defects

#### BLANK II. (2)

1. Do you have, each day, a definite time for study at home? When?Do you have a separate room for study? 2. Do you study in a room where other people are talking? Does this bother you?Are those studied at home your hardest lessons or your easiest?Would you rather study at home or at school? 3. Do you, as a rule, study with some one else? 4. Do you get help in studying your lessons? From parents?
5. How long do you study at a time?. 6. How long, on an average, do you spend on a lesson in the subjects you are carrying? Give name of study and time in space below
7. Do you write out notes on your lessons?Do you write out translations?Do you outline your lessons?Do you underscore the most important points in the text?Do you read your lessons out loud?Do you say your lessons to some one?Do you close your book and repeat your lesson to yourself?Mention any other plans
8. Do you review earlier lessons when not asked to do so by the respective teachers?

## SECTION I.

## Some Physical Characteristics.

It will not be maintained in this discussion that the traits herein tabulated are necessary correlative elements to mental distinguishability. The facts are presented merely as facts, and may be interpreted in various ways, or not at all. It is probable that they have no significant meaning, either for mental alertness or educability, and that another group selected in a similar manner in an-

other section of the country might show totally different physical traits. For example, the predominance of brown and black eyes in this group is very surprising, especially in view of the fact that there is such a large percentage of Germans and Scandinavians in Illinois. Yet we are not ready to assert a definite correlation between eye coloring and mental acuity. Other studies in other parts of the country might reveal different results.

### HEIGHT.

One hundred-fifteen students answered the question as to their height in this study. The minimum height in the entire group is 4 ft. 10 in., the maximum 6 ft. 3 in., and the median height is 5 ft. 6 inches. Of the 35 boys answering, the maximum height is 6 ft. 3 in., the minimum height is 5 ft. 2 in., and the median is 5 ft. 9 inches. Of the 80 girls answering, the minimum height is 4 ft. 10 in., the maximum is 5 ft. 11 in., and the median is 5 ft. 5 inches. These results were obtained after deducting ½ in. from each measurement in allowing for heels of shoes.

Comparing these results with the anthropometric tables of Boaz and Smedley it is evident that this group is somewhat above the norms presented by them. The median measurement for the girls is about two inches above the norm for 18 yr. old girls presented by Smedley, and the median height of the boys is approximately 2 inches above the norm for 18 yr. old boys in Smedley's tables.

The writer has no theory in explanation of these facts. Whipple states that children of purely American descent are taller than foreign. Approximately 75% of the students in this group are Americans. Boaz states that first-born children are taller than later-born. Approximately 45% of this group are first born, but the families represented are so small that this fact means little. Boaz also states that children of non-laboring

classes are somewhat taller than those of the laboring classes. But, at least 60% of the present group of parents may be classed as laboring. Thus, there seems to be no valid explanation at hand for the fact that the stuents having marked intellectual ability are somewhat taller than other groups of similar age which have been measured.

The following table gives the whole distribution of the height of the 115 students answering this question.

TABLE I.

	He	ight		Boys	Girls	Total
4	ft.	10	in	0	1 1	1
5	2.2			Ö	3	3
5	9.7	1	"	ō	9	2
5	9.2	11/2	,,	ñ	02	2
5	2.2	2 12	,,	1	4	5
5	2.2	2 1/2	2,2	1	9	18
5	2.3	3	7,	1	E	ä
5	,,	3 1/2	,,	1	1 1	9
5	,,	0 72	*,	4	1 0	2 2
	,,	41/	,,	0		
5	, ,	4 1/2	,,	2	В	5
5	, ,	5	,,	0	7	-7
5	, ,	5 ½ 5 ¼	,,	2	1	3
5		5 1/4		, 0	1	1
5 5 5 5	2.2	5 3/4	**	0	1	1
5	2.2	6	**	0	7	7
5	, ,	61/4	"	0 .	1	1
5	, ,	6 1/2	**	1	0	1
5	2.7	7	''	4	13	17
5 5 5	2.2	18	,,	2	4	6
5	2.2	8 1/2	"	2	2	. 4
5	,,	9	2.7	2	3	5
	,,,	10	**	0	2	3
5 5	,,	101/2	,,	6	. 2	2
5	9.9	11	,,	7	2	9
5	2.2	11%	,,	9	0	- 1
5	3.3	11%	,,	1	0	1
8	, ,	1174	* * * * * * * * * * * * * * * * * * * *	7	0	1
8	, ,	2	,,	2	0	2
	,,		,,	1	0	1
6		3	***************************************	2	0	2
				35	1 80	115

### WEIGHT.

The distribution of weight of one hundred sixteen pupils responding to this question is shown in Table II. It should be noted that the figures for weight are only an approximation of their actual weight, no scales being available at the time the blanks were filled out. The table shows their weight after deducting 5 lbs. for cloth-

ing for each girl and 7 lbs. for each boy.

The minimum weight in the entire group is 98 pounds, the maximum is 180 pounds, and the median weight is 124½ pounds. Of the 34 boys the minimum weight is 100 pounds, the maximum is 180 pounds, and the median weight is 141 pounds. Of the 82 girls the minimum weight is 98 pounds, the maximum is 160 pounds, and the median weight is 120 pounds.

Naturally, we would expect a general correlation between weight and height. The same correlative proportions above the norms given by Boaz and Smedley are found to exist in this group as in the case of height.

According to Whipple the correlation between weight and mental ability or precocity is found to be positive by some investigators, negative by others, and indifferent by still others. He quotes from Porter, who states that "precocious children are heavier and dull children lighter than the mean child of the same age," and draws a further practical conclusion that:

"no child whose weight is below the average for its age should be permitted to enter a school grade beyond the average of its age, except after such physical examination as shall make it probable that the child's strength be equal to the strain. 'Porter's conclusion is confirmed by Smedley at Chicago, and, so far as his limited data suffices, by DeBusk.' On the basis of the teacher's estimate of mental ability, Gilbert, however, finds no constant relation between weight and such ability, save from 10 to 14 years the dull children are much heavier than bright, while West, who, used a similar basis, finds a negative correlation throughout."

TABLE II.
DISTRIBUTION OF WEIGHT FOR THE ENTIRE GROUP OF 116 STUDENTS.

	ight		Boys	Girls	Total
	lbs	 	0	2 2	2 2 5 1
99	17	 	0	2	2
100	"	 	1	4	5
101	"	 	0	1	1
102	"		0	1.	1
105	27	 	ŏ	4	4
106	,,	 	Ö	1	1
109	,,	 	ŏ	i	1 1
110	,,	 	Ö	4	4
111	,,	 	0		
112	,,	 	o	1 3 1	* 1 3 1
113	,,	 	0	. 5	3
114	17	 		1	
114	,,	 	0	1	1 1
	,,	 	2	5 3	7
116	,,	 	0		3
118	,,	 	1 .	4	5 3 5 1 2
119	,,	 	0	, 3	3
120	,,	 	2	, 3	5
121	,,	 	O	1 .	1
122		 	0	2	2
123	"	 	0	8	3
124	"	 	0	1	1
125	"	 	1	2	3 1
127	"	 	1	0	1
128	"	 	1	1 .1	2 2 2
130	"	 	1	1 2	2
132	"	 	0	2	2
133	"	 	0	1	1
134	"	 	0	3	3
135	77		3	3	6
136	17		0	1	1
137	27		1	ī	
138	11		ī		2 2
140	27	 	2	2	4
141	17		ō	1 2 2	
142	"	 	1	0	2
145	,,	 	4	1	I E
146	. 99	 	Ö	1	5
148	22	 	ő	1	1
149	22 * * * * * * *	 	1	0	1 1
150	,,	 	1		8
	,,	 	D	3	8
155	,,	 	5 2 0	2	A
156	,,	 	0	1	1
160	,,	 	0	1	1
165		 	1	0	1
175	17	 	1	1	2 2
180	"	 	2	0	2
		 1	34	1 82	116

# COLORATION OF EYES AND HAIR.

Tables two and three show the eye and hair coloration. The table showing eye coloration is particularly

interesting, owing to the predominence of black eyes. However, a recent study was made of five high schools in different sections of Illinois in reference to eye coloring, showing that about sixty per cent of all students in attendance have eyes ranging from brown to black, while nearly thirty percent have distinctly blue eyes. Thus, the coloration of the distinguished group of pupils is not very far from the normal of all pupils who are in attendance upon the high schools in Illinois.

Table 4 shows a positive correlation between the eye coloration and hair coloration when compared with table 3

TABLE III.

DISTRIBUTION OF EYE COLORATION.

Color of eyes	Boys	Girls	Total
Black	13	38	51
Brown	11	28	34
Gray	7	19	26
Hazel	2	2	4
Blue	1	0	1
	34	82	116

TABLE IV.

DISTRIBUTION OF HAIR COLORATION.

,,			e
Color of hair	Boys	Girls	Total
Black	9	6	15
Brown	24	61	^ 85
Light	1	6	7
Auburn	-0	В	B
Blonde	0	8	3
Red	0	3	1 5
	34	82	116

TABLE V.

GENERAL HEALTH DISTRIBUTION.

General health	Boys	Girls	Total
A	23	54	1 77
B	1 8	27	35
C	3	1	4
	34	82	1 116

The above table shows the general health of the group to be very favorable for intellectual ability. The present system of our high school work is very strenuous and good health is essential for the best achievements, in fact it is an absolute necessity. In the table "A" means excellent health; "B" good health, and "C" means fair health, students who are at times under the care of a physician.

Only a few physical defects were mentioned, and they are given in the following table:

#### TABLE VI.

For both	boys and g	irls.	
Eyes=7.	Heart=1.	Spinal=1.	Defective lower limb-1.
Physical	defects for	boys.	
Eyes=2.	Heart=1.	Spinal=1.	Defective lower limb=1.
Physical Eyes=5.	defects for	girls.	

From a careful study of the tables dealing with the physical characteristics of this special group of distinguished students it is evident that in the main they have not labored under physical handicaps. There is not a single case reported which has apparently suffered from poor health and physical infirmities of a nature which was sufficient to interfere with their school work. The conditions of health and physical vigor are in a high degree favorable to the student doing a high grade of intellectual work. The group as a whole is physically fit, and these individuals doubtless rank as high above their fellows in the above traits as in the mental abilities shown in their class work.

Teachers should take into consideration that bodily health and vigor are positive correlatives with mental alertness and strength. Thus, a healthy body is very essential in the education of youth both as a means and as an end. Thorndike says that health is better than strength or grace, and that the action of the heart and

circulatory system, the lungs, the digestive and other organs is far more important than the action of volun-

tary muscles of legs, arms and chest.

Because of the very definite correlation between mental and physical activity, a strong body with properly functioning vital parts is essential to the best mental work. There may be exceptions, but on the whole mental vigor cannot exist without physical vigor. The student who expects to excel in mental capacity must look to the development of his physical body which is conducive to health

Thorndike sums up his discussion on health as follows:

"Good teaching treats health as of importance comparable with intellectual progress. Good teaching takes account of bodily conditions of pupils and co-operates with parents and public

authorities for their improvement.

"The teacher should first, know these bodily conditions in the case of each pupil; second, do what is appropriate to remedy them; and third, allow for them in arrangements for teaching and in estimates of pupils."

# SECTION IV.

Families: Home Conditions, Size of Family. Nationality, etc.

One of the first institutions to be developed in society was the family. It has in most instances formed the fundamental basis for the various other social institutions which have existed. It is evident that the family is the fundamental factor for the general welfare of the individual.

The tendency in recent years is to lay great stress upon favorable home condition for the education of youth. It is through the home that the child learns a language, and develops his moral and ethical standards of life. It has been very justly maintained that a large percentage of delinquency and backwardness among children comes as a result of unfavorable home conditions. Recent studies made upon the inmates of our penal and reform institutions reveal the fact that the larger number of inmates began their downward career because of bad home conditions. Studies in some instances reveal that from fifty to seventy-five percent of all delinquency is traceable either directly or indirectly to poor home conditions. If home conditions are bad, the destruction of character is almost inevitable.

If we account for the delinquency of youth very largely upon the ground of being reared in poor home conditions, it is only natural to conclude on the other hand, if we have the right conditions the home will constitute the greatest formative factor in the training of any individual. The very life influence which is received in the home is reflected in every undertaking in which the individual finds himself engaged. If the highest degree of efficiency is to be attained in the education of our youth, it is evident that we need the best of home conditions.

In the study of this group of distinguished pupils it was deemed quite essential to know something of the home conditions of students who had been able to excel their classmates in attaining a high grade of scholarship. Thus, questions were inserted in the blanks relative to the home conditions and social standing of the parents as well as other questions concerning the family condition.

TABLE VII.

GENERAL HOME CONDITIONS.

Home Conditions		Bo	ys			Gir	rls			Tot	al	
of parents	A	B	C	D	A	B	C	D	A	B	CI	D
Social Standing	10	12	8	4	25	36	16	3	35	48	24	7
Financial "	6	10	17	1	9	31	30	9	15	42	47	10
Int. in Ed	18	9	5	2	38	23	16	2	56	32	21	4
Ed. of Father	4	7	20	3	9	17	45	7	13	24	65	10
Ed. of Mother	4	8	18	8	6	24	39	6	10	32	57	9

# KEY TO ABOVE TABLE.

Social Standing: Rank "A" are foremost social leaders. Rank "B" are active social leaders. Rank "C" are nominal in social activities. Rank "D" are persons who take no part in social life.

Financial Standing: Rank "A" are persons who are independently wealthy. Rank "B" are persons who are well to do in a business way or receive a good salary. Rank "C" are persons who are considerably limited in finance. Rank "D" are persons who are having a severe struggle to make ends meet.

Interest in Education: Rank "A" are persons who may be termed as pushing forward every possible interest in education of their children. Rank "B" are persons who are active in educational interest. Rank "C" are persons who are nominally interested. Rank "D" are persons who pay no attention to educational interests.

Education of Father and Mother: Rank "A" are persons who are college graduates. Rank "B" are persons who are high school graduates. Rank "C" are persons graduated from the common schools. Rank "D" are persons with less than common school graduation.

From a study of the above table it is quite evident that the home influence of the 114 pupils answering these questions is excellent, and it seems very probable that it has considerable effect upon the character of their work.

Two-thirds of these parents are social leaders in their

respective communities, and have doubtless made their influence greatly felt in an educational way. It is to be observed that extreme wealth does not figure very largely. Indeed it may be a handicap. About twelve percent are independently wealthy and about eight per cent are extremely poor. Eighty percent are well to do in a financial way; thus, ninety-two percent have been reared under such financial conditions as to keep them from knowing what it meant to struggle against poverty. They have doubtless always had all the physical wants supplied.

This group has also had the advantage of being reared by parents who are unusually qualified in an educational way. Nearly one-tenth are college graduates, almost one fourth are high school graduates, and only a small portion below a common school education. According to the reports given by the various principals, they are almost as a whole interested in education; even the eight percent which fall below common school graduation show considerable interest.

Thus, the entire group has a parental training which we might well expect to result in a high grade of mental efficiency. It represents a type of influence which would easily stimulate the student to surpass his classmates in competitive educational work.

Size of families and place in family of the exceptional child.

From a study of the data received on this question, it is not probable that we can attach any great significance to the resulting tables. With few exceptions the families are small, the average for the entire group is 2.4 children per family. Eighty percent of the group occupy either first or second place in the family. The very fact that the families are small may account in some measure toward determining the advancement of the pupils, since the parents could more easily devote

much time to each child in his school work. Yet, it is not wise to lay too much stress upon this point. In large families it quite often happens that the younger children have a decided advantage. The older children are familiar with the school and its work and will take great pains to teach the younger brothers or sisters. Thus, it many times happens that the younger children of a family are enabled to make a much better record in school work than the older children were able to make.

The following tables give the complete tabulation of data received upon the size of families. One hundred seventeen students answered the questions.

TABLE VIII.

DISTRIBUTION OF PUPILS HAVING BROTHERS.

Pupils having brothers	Boys	Girls	Total
None	8	16	24
One	16	36	52
Two	7	15	22
Three	2	8	10
Four	2	5	7
Five	0	0	i ö
Six	Ö	2	2
	35	82	117

TABLE IX.

DISTRIBUTION OF PUPILS HAVING SISTERS.

Pupils having sisters	Boys	Girls	Tota
None	12	26	38
One	11	25	26
Two	G	15	21
Three	2	В	B
Four	2	8	10
Five	2	2	- 4
Six	0	O	0
	35	82	117

TABLE X.

DISTRIBUTION OF PLACE OF STUDENT IN FAMILY.

Place in the family	Boys	Girls	Total
First	13	38	51
Second	13	21	34
Third	4	12	16
Fourth	. 1	2	8
Fifth	0	4	4
Sixth	2	1	3
Seventh	0	2	2
Eighth	1	0	1
	34	80	1114

## AGE.

One hundred sixteen pupils answered the question relative to the year of birth. Fifty of this number were eighteen years of age at the time of their graduation, thus having finished the twelve years of work of both the common and high school in twelve years. Twentythree completed the work in eleven years and one succeeded in completing it in ten years. Thirty-one required thirteen years, but nearly half of this number did not enter school till the age of seven, and some were out for a year on account of sickness or other misfortune. From the data in table IX, we would hardly conclude that these pupils are especially precocious, and endowed with exceptionally brilliant minds, but rather they are to be regarded as good workers. They represent a class which has been able to maintain a good record throughout the entire course, and were able to adjust themselves to the existing conditions in our high school system. The course of study, it would appear, has been pretty well adapted to their abilities, since the modal number (fifty) were able to do the work in the prescribed time.

The following tables XI and XII show the distribution of births by years and months.

TABLE XI.

DISTRIBUTION OF BIRTHS BY YEARS.

Year of birth	Boys	Girls	Total
1890	1	0	1
1895	B	7	10
1896	10	21	31
1897	13	37	50
1898	6	17	23
1899	1	0	1
	34	82	1116

TABLE XII.

DISTRIBUTION OF BIRTHS BY MONTHS.

Month of birth	Boys	Girls	Total
January February March April May June July August	3 2 1 2 8 6	6 5 10 6 5 8 8 8	9 7 11 8 8 8
September October November December	4 2 3 1 31	6 7 4 13	10 P 7 14 109

It is to be observed from table XII that the different months of the year have a fairly equal distribution. Although, the maximum for a single month exceeds the minimum by twice. However, there is nothing in the table to indicate that the particular month of the year for birth should have anything to do with exceptional ability.

# RESIDENCE.

The following table shows that 80% of the group live in town. It is to be noted, however, that the larger portion of them come from small towns where it has been their privilege to receive the influence of the country. According to Hall, country boys are prone to inattention, but far more independent and able to take care of them-

selves, which is suggestive that country life is more effective in shaping ideals and character than city life. It is said that country children on the whole, are more altruistic than city children.

TABLE XIII.

DISTRIBUTION OF RESIDENCE BY TOWN AND COUNTRY.

Place of residence	Boys	Girls	Total
Town	25	68	94
Country	9	14	23
1	34	82	116

## NATIVITY.

Table XIV is significant in the fact that 100 of the 115 who answered the question relative to the State in which they were born, are natives of the State of Illinois. The settled life is always more conducive to good school work. The child who is moved from place to place is always at a disadvantage because of changing from school to school. The task of readjustment to new school surroundings is at all times an arrest to the child's progress, and doubtless in many instances has been the large factor in causing his complete discouragement and dropping from the school course.

TABLE XIV.

DISTRIBUTION OF BIRTH PLACE BY STATES.

State	Boys	Girls	Total
Ill	34	66	100
Iowa	. 0	3	3
Mich	0	2	2
Wis	0	1	1
Ind	Ď.	1	1
Kans.	0	2 .	2
Arkans.	0	1	1
Mo	0	2	. 2
Minn.	Ŏ	1	1
Penn.	0	ī	1
Tenn.	0	î	ī
	21	91	115

# OCCUPATION OF PARENTS.

It is to be observed from Table XV that the occupations of the parents of this exceptional group have quite a range, and with the exception of the farmer and merchant classes they are quite equally distributed. When we consider the fact that these two classes represent a much larger percentage of the total population than any of the other classes in the table, it is hardly possible that they have larger representations than their share.

In the main they come from homes where the parents represent some vital active work which necessarily gives the family a standing in its community. Thus, the environment from the standpoint of a progressive life is very favorable for this distinguished group.

TABLE XV.
DISTRIBUTION OF FATHERS' OCCUPATIONS

Occupati	on of fathers for	Boys	Girls	Total
Farmers		11	20	31
Opticians		.0	1	1
Plumbers		0	1	1
Manufac	urers	0	3	3
Banker		1	1	2
Day Lab	orers	0	2	2
Machinis	ts	2	1	3
Wh'l Gr	ocers	1	0	1
Mail Car	rier	2	1	3
R. R. C	onductors	0	1	1
Clothiers		1	1	2
· Co. Reco	rders	0	1	1
Mine Ma	anagers	0	1	I
News Pa	per	1	1	2
	rs	0	1	x
Expr. As	ents	0	1	1
Liveryme	n	0	1	1
Miners .		0	1'	3
Loco. En	gineer	1	0	1
Mgr. Pu	b. Util	0	1	1
Bookkeer	er	0	1	1
Merchan	8	4	9	13
Teachers		1	1	2
Tanners		0	1	1
Physician	15	2	3	5
Landsep.	Gdr	1	0	1
Ins. Agt		2	2	18
Lawyers		0	1	1
Real Est	ate	0	2	2

Lumbermen	0	1 2 1	2
R. R	0	1	1
Janitors	Ø	1	1
Secy. U. S. Agr	0	1	1
Ministers	1	4	5
Washer-woman	0	1	1
Auct. & Dealer	0	1	1
Sales Mgr	0	1	1
Butchers	0	- 1	1
Foreman C. B. Q	0	1	1
Clerks	2	1	3
Contractors	0	2	2
Chemists	0	1	1
Retired	1	0	1
	34	78	112

TABLE XVI.

DISTRIBUTION OF NATIONALITY OF FATHERS.

Nationality of fathers	Boys	Girls	Tota
Americans	26	52	78
English	0.	6	6
Germans	3	. 10	13
Dutch	2	0	2
Irish	0	2	2
French	0	2	2
Jew	1	0	1
Scotch	2	4	6
Swede	0	1 .	1
Welch	0	2	2
Norwg	1	0	1
	35	79	114

TABLE XVII.

DISTRIBUTION OF NATIONALITY OF MOTHERS.

Nationality of mothers	Boys	Girls	Total
Americans	27	52	79
English	2	8	10
Germans	0	12	12
Dutch	1	1	2
Irish	2	1	В
French	0	0	0
Jews	1	0	1
Scotch	1	2	3
Swede	0	1	1
Welch	0	2	2
Norwg	0	0	0
	34	79	113

From the above tables it is to be observed that almost 70% of these exceptional students are of American descent. Ten other nationalities are represented and of these nearly one third are Germans.

It is not at all improbable that the mingling of the races from which the Americans come has some part in raising the standard of intellectual ability. Infusion of blood has beyond question done much in the way of developing the physical qualities of men. Doubtless, the same will hold for the mental.

## SECTION V.

ELEMENTARY SCHOOL RECORDS: HIGH SCHOOLS; SIZE, ENROLLMENT, PROSPECTIVE GRADUATES, STUDY PLANS, ETC.

It was difficult to obtain a very definite record of all of these students for their common school work—yet enough was secured to make it worth while to give the tabulated data.

TABLE XVIII.

DISTRIBUTION OF COMMON SCHOOL ENTRANCE.

to common school	Boys	Girls	Total
1898	1	0	1
1901	1	4	5
1902	10	16	26
1903	16	43	59
1904	4	17	21
1905	1	1	2
1906	1	1	2
	34	82	116

The above table indicates as, has already been pointed out, that the larger percent of the group have required the full twelve years for the completion of the common and high school work.

TABLE XIX.

DISTRIBUTION OF COMMON SCHOOL GRADES BY MINIMUMS, MEDIANS AND MAXIMUMS:

Common school record	mbe u N	er of	boys		mb u N	er of	girls		mbe u N	er of	both	
200014		Min.	Med.	Max.		Min.	Med.	Max.		Min.	Med.	Max.
Read	18	85	92	97	34	85	93	100	52	85	98	100
Hist	18	85	93	98	34	83	92	98	56	83	92	98
Spell	18	86	95	98	36	82	95	100	54	82	95	100
Hyg	6	80	90	98	11	80	92	95	17	80	92	96
Writ	18	75	88	94	34	80	92	97	53	75	91	97
Music	13	80	90	97	20	82	93	98	34	80	90	98
Physio	18	82	93	96	36	80	92	99	55	80	92	99
Algbra .	4	82	97	97	3	94	95	95	7	93	95	97
Arith	18	82	94	98	37	73	93	98	55	73	94	99
Draw	13	80	90	94	23	80	90	94	36	80	90	94
Man. Tr.	9	87	90	92	0	0	0	0	9	87	90	92
Latin	1	90	90	90	1	88	88	88	2	88	89	90
Langu	16	85	92	97	38	81	92	97	44	81	92	97
Geog	18	85	92	96	38	76	91	98	56	76	91	98
Cook	0	0	0	0	4	90	94	97	4	90	94	97
Germ	0	0	0	0	2	88	90	98	2	88	90	93
Phys. Tr.	1	95	96	95	. 4	85	86	96	4	85	86	96
Gram	18	82	92	97	38	84	92	98	55	82	92	98

It is to be noted in table XIX that the median grades do not vary greatly. The lowest median falling at 87 and the highest at 95. It would appear from the table that on the whole the pupils did all round work in the grades and do not tend to drift toward any special line of study.

# HIGH SCHOOL ENTRANCE.

According to table XX, considering the fact that twelve were compelled to drop out a year each for various causes, the remainder of the entire group did the course in the prescribed four years, with the exception of ten who did it in three years and one in two years.

The entire number of schools report a total enrollment of 9,976 pupils. The total senior class enrollment numbers 1311 with 1263 as prospective graduates. The minimum enrollment of the schools is 36 pupils, the maximum is 1167, and the median enrollment is 160.

TABLE XX.

DISTRIBUTION OF HIGH SCHOOL ENTRANCE.

Year of entrance to high school	Boys	Girls	Total
1910 1911 1912 1913	5 25 8 0	68 7 1	12 93 10
	34	82	116

TABLE XXI.

DISTRIBUTIONS OF HIGH SCHOOL GRADES BY MINIMUMS, MEDIANS AND MAXIMUMS.

High '	m b	er of	Boys		mb	er of	both		mb	er of	Girls	
school	u				u				n			
record	N				N			170	N	1200	125 2	120
		Min.	Med.	Max.		Min.	Med.	Max.		Min.	Med.	Max.
Latin	32	76	91	99	66	76	93	99	98	76	93	99
French	0	0	0	0-	2	93	94	95	2	93	94	95
German	26	77	91	98	41	88	94	99	67	77	93	99
Algebra	31	83	93	99	69	80	93	9.9	100	80	94	99
Pl. Geom	30	81	92	09	68	75	94	100	98	75	93	100
Ancient His	22	80	94	100	46	80	93	100	68	80	93	100
Bolid Geom	24	85	93	99	65	77	94	99	89	77	94	99
Med. Hist	24	75	92	97	22	81	93	99	46	75	93	99
Eng. Hist	12	86	95	97	43	81	95	100	55	81	92	100
U. S. Hist	24	71	91	98	53	84	94	98	77	71	94	98
Eng. Comp	33	85	92	98	71	81	94	98	104	84	93	98
Eng. Lit	32	88	93	97	71	84	93	98	103	84	93	98
Chemistry	23	83	93	97	17	80	94	98	40	80	93	98
Physics	29	80	92	99	57	82	92	97	86	80	92	99
Botany	19	79	91	99	40	81	93	98	59	79	92	99
Physiology	16	87	92	9.8	48	80	94	99	83	80	94	99
Hygiene	14	85	90	93	12	80	93	98	26	80	93	98
Mech. Dr	6	88	82	94	1	85	85	85	7	85	92	94
Man. Tr	6	90	92	98	2	85	89	98	8	85	92	98
Civics	23	71	92	99	31	85	93	100	54	71	92	100
Stenog	5	94	95	98	5	94	95	98	10	94	95	98
Com'l. A	8	89	95	96	20	85	92	98	28	85	93	98
Typr. writing.	전	82	90	98	7	88	93	95	D	82	93	98
Bk. keeping	7	83	92	98	12	88	92	97	19	83	92	9.6
Doms. Scs	0	(i)	0	0	17	82	92	97	17	81	92	97
Zoology	3	87	90	96	9	83	94	97	12	83	93	97
Vocational	0	0	0	0	8	91	93	96	3	91	93	96

It is obvious from the above table that the medians vary even less than in the common school record. The lowest median being 92 and the highest 95, which is further evidence that this group of distinguished people are well proportioned in all the various subjects found in the high school curriculum.

# REASONS FOR HIGH SCHOOL ATTENDANCE.

It is quite evident from table XXII that educational ambition or desire for mental development is the leading factor in causing the student to take the high school course. Owing to such a factor, the students in the main evidently have had their own choice. Being a group, the members of which have the motive for a better education, it is not at all surprising that they would tend to excel in their school work.

TABLE XXII.
DISTINGUISH OF REASONS FOR HIGH SCHOOL ATTENDANCE.

Reasons for H. S. Attendance	Boys	Girls -	Total
Ambition for an Education	15	50	65
A matter of course	6	5	11
Home Influence	3	7	10
Preparation for Teaching	1	6	7
Preparation for College	4	3	7
Prep. for Life Work	1	4	5
Social Ambition	.0	4	4
Like for School	0	1	1
Influence of friends	0	1	1
For Success	2	1	3
For Diploma	1	0	1
Sent by parents	1	0	1
	34	82	116

# STUDY HABITS.

One of the most valuable things for any student is to learn how to study. Study plans are sorely neglected everywhere in our schools. It is too often the case that the teacher in reality works for the student, rather than leading him into the subject in such a way that he is able to economize his time in the mastery of the subject.

Tanner says that it is no uncommon thing to find a child with average brightness who requires two or three

times as long to prepare a lesson as another child. This, however may be due to some nervous disorder, but in a large number of cases, the mere ignorance of how to study is the cause of such a condition.

It is quite evident from the following table that a definite time of day for the study of lessons has no significance in the case of this exceptional group of students. Sixty-five percent of the number report a definite study period for either forenoon or afternoon and evenings, while the data from 5,772 other Illinois high school students show that seventy-two percent of all students have a definite study period.

TABLE XXIII.

Definite time for study	Boys	Girls	Total .
Mornings	B	13	16
Afternoon and evening	13	48	61
No definite time	19	21	40
	35	82	117

According to the tabulation in table XXIV, nearly forty percent of this distinguished group have separate study rooms. This small percentage is rather surprising, and still more so when the data from 5,772 other high school students in Illinois show more than forty-four percent as having private study rooms.

TABLE XXIV.

Students having study room	Boys	Girls	Total
Yes	13	33	46
No	22	49	71
	35	82	117

Table XXV is of considerable importance. It is evident that proper attention cannot be secured amid confusion and distraction. While these distinguished students are not largely provided with separate study rooms

the table shows that nearly eighty percent of them have the advantage of doing their study in rooms which are free from conversation. Of the 5,772 group only fifty percent have the opportunity of studying in rooms free from conversation.

TABLE XXV.

Conversation in study room	Boys	Girls	Total
Yes	7	17	24
No	27	65	92
	34	82	116

However the data of Table XXVI would appear in some degree to modify the significance of Table XXV, since thirty-seven percent of our distinguished group claim that they are disturbed by conversation in the study room, and twenty-seven percent of the 5,772 group report conversation as hindering in their study. Thus, in the estimation of the individal students from both groups, the larger percentage seem to think that conversation does not interfere with their work.

TABLE XXVI.

Does conversation disturb?	Boys	Girls	Total
Yes	0.4	33 49	43 78
	34	82	- 116

TABLE XXVII.

Subjects studied at home	Boys	Girls	Total
Easiest	7 27	35	42 - 74
	34	82	116

It is evident from the above table that there is a tendency toward the selection of home for the preparation of the hardest lessons. And, in the 5,772 group the

percentage is 73, which shows a greater tendency among average students.

TABLE XXVIII.

Preference of study place	Boys	Girls	Total
Home study	10	88	43
School study	24	49	73
	34	82	116

Sixty-four percent of this distinguished group report a preference for school study, while seventy-three percent of the 5,772 group report a preference for school study. It was observed in table XXVII that both groups tend to study the easier lessons at school, and table XXVIII shows a much greater percentage of preference for school study. The social surroundings of the school will in some measure account for the preference in each case.

TABLE XXIX.

Do you study alone?	Boys	Girls	Total
Yes	31	70	101
No	3	12	15
	84	82	116

It is to be noted from table XXIX, eighty-eight percent of these distinguished students study alone, thus depending upon their own mental ability to perform the task of lesson preparation. However, we cannot conclude that this is in any degree responsible for their being able to excel their classmates, since the study of the 5,772 group shows a percentage of 91 as studying alone.

TABLE XXX.

Help received from	Boys	Girls	Total
Parents	1	12	13
Teachers	10	47	57
Friends	õ	10	15
No help	18	13	31
	974	82	116

According to the above table, seventy-three percent of the entire group receive help with lessons. Sixty-seven percent of this help is given by the teachers. Of the 5,772 group only forty-three percent of the entire number receive help with their lessons and fifty-two percent of this help comes from the teachers. Thus, it would appear that with the exceptional group, outside help from teachers may have considerable to do in enabling them to excel their fellows.

TABLE XXXI.

Frequency of help	Boys	Girls	Total
Occasionally	4	12	16
Seldom	9	22	- 31
As needed	4	17	21

Table XXXI is of but little importance because of the indefinite answers given.

TABLE XXXII.

Written aids used	Boys	Girls	Total
Notes	8	33	41
Translations	5	28	33
Outlines	9	43	52
Marking Texts	16	57	73

In the above table it is to be noted that of the 116 students answering the questions relative to the written aids that thirty-five percent make use of notes, twenty-seven percent use translations, forty-five percent use outlines, and sixty-three percent mark the text book. Of the data received from 1,924 other high school students, thirty-six percent use notes, twenty-nine percent use translations, forty-three percent use outlines, and sixty-two percent mark the text. It is clear that we are unable to reach any conclusions from the above to the effect that any of the methods of written aids have played any par-

ticular part in assisting the exceptional group to surpass other students.

TABLE XXXIII.

Oral Aids	Boys	Girls	Total
Reading aloud	1	14	15
Reciting to others	5	5	10
Reciting to self	12	40	52

A study of table XXXIII reveals the following percentages: Thirteen percent read aloud, eight percent recite to others and forty-five percent recite to self. Of the 1,924 group, fourteen percent read aloud, seventeen percent recite to others, and sixty-three percent recite to self. Thus, we have a larger percentage of average people using the methods of reciting to others and reciting to self. We would not conclude that the above mentioned oral aids have assisted the exceptional group to gain their place of distinction, but doubtless they have been of assistance.

TABLE XXXIV.

Memorizing of important points	Boys	Girls	Total
Yes	31	80	111 5
	34	82	116

It is to be noted from the above table that ninety-five percent of these exceptional people do memorize the important points in the lesson. Of a group of 2,471 students answering this same question, it was found that seventy-five percent of them memorized important points. It seems quite probable that the method of memorizing important points of the lessons may in a small measure have a part in enabling this distinguished group to excel in scholarship.

TABLE XXXV.

Voluntary Reviews	Boys	Girls	Total
Yes	19	74	93
No	15	8	23
	85	82	116

Eighty percent of these exceptional students make voluntary reviews. Of the 2,471 group, only forty-four percent review their lessons voluntarily. It seems quite probable that voluntary review may have had a large influence in giving the exceptional group their superior place.

TABLE XXXVI.

Memorizing entire lesson	Boys	Girls	Total
Yes	3	13	16
No	31	69	100
	34	82	116

Fourteen percent of the distinguished students attempt to memorize the entire lesson. Of 1,928 group it was found that eleven percent report as memorizing the entire lesson.

From the data received from these exceptional students, it is very difficult to give definite reasons for their superior intellectual achievement. Aside from the fact that they are excellent specimens physically, and have always enjoyed the best of health, there does not seem to be any well established cause for their excellent ability. Their methods of study are not vitally different from that of thousands of other youth working in our high schools in the State of Illinois. The conditions surrounding their study periods are practically the same as that of all other students, and they seem to have no well defined methods of study distinct from those used by all others engaged in the same work.

It is quite probable that the reasons for distinguishability are to be found in certain psychological conditions not at all reached by the present study. Greater mental

acuity, better attentive powers, quicker reactions to the stimuli of the school, better memories, and larger capacities for properly assimilating and association of all sense material presented in text book and recitation; these and many other tendencies peculiar to individual students may account for their superiority in educational work.

## SECTION VI.

SOCIAL PROBLEMS: COLLEGE AND LIFE PLANS.

In the by-gone days, the school ranked among the most important social functions. In the rural places and smaller towns the school house was the gathering place for various purposes. However, in recent years, there has been a sad neglect in the matter of uniting properly the school and community interests. Betts in making a summary of the social process says that it is made up of all the varied experiences of men as they work and play together, including all the manifold activities constituting the social institutions. This social process is man's creation as well as his opportunity.

The school has been said to be both an expression of the social consciousness and also a thing that in turn

reacts upon the social consciousness.

Table XXXVII gives a general view of the outside advantages, social as well as instructive. The table is indicative that these outside advantages have been, generally speaking, very good. However, churches and libraries furnish advantages to the larger number.

TABLE XXXVII

Outside advantages	 Boys	Girls	Total
Travel	 15	37	52
Libraries	 26	59	85
Museums	9	17	26
Theaters	 . 15	28	43
Churches	 28	70	98
Chaut	 1	1	2
Y. M. C. A	 1	0	1
Lyceum	 1	1	2

# CHURCH RELATIONSHIP.

The adolescent period is acknowledged to be the natural period of conversion, and as has been said, the religious life of the child will unfold naturally at this time, if properly directed. But on the other hand, if it is interfered with, will become contorted just as the opening bud will open into an incomplete flower if the natural

process meets interference.

A failure on the part of the church in the past has been the interference with the natural process of conversion, rather than assisting it. Hall says the change of pubescent years means the forcing of spiritual precocity. He likens the precocious infant Christian to early risers who are usually conceited all forenoon and stupid during the afternoon and evening. Thus, the infant Christians are usually pious and full of affectations during the early years of life and very commonplace during the later years. Persons who are led into the Christian life in a normal way by simple habits of service are more apt to build a strong moral and ethical life which will ripen into a serene Christian character.

Conversion and education appear to be very closely related, since for the majority of people, conversion is largely made up of what they expect. The individual who is looking for some emotional storm looks in that direction until he succeeds in bringing himself into the desired emotional state. This state is in all probability bordering on the hypnotic and for the time being, the subject is very susceptible to suggestion. On the other hand, the individual who is looking for a slow religious development will in all probability find that kind of a

life developing within him.

Tanner says that if the religious feelings are not aroused at puberty, some other interest will come into their place. Ordinarily, in such cases, the moral interest will take its way in 33% of the men and 43% of the

women, but it may be the intellectual on the basis of 21% and 22%, or aesthetic at 15% and 16%.

Starbuck gives the following table of motives leading to conversion:

Motive and Forces Present at Conversion	Females	Males %	Total
Fear of Death or Hell	14	14	14
Other Self-Regarding Motives	5	7	6
Altruistic Motives	6	4	5
Following out a Moral Ideal	15	20	17
Remorse, Conviction for Sin, etc	15	18	16
Response to teaching	11	8	10
Example, Imitation, etc	14	12	13
Social Pressure, Urging, etc	20	17	19

TABLE XXXVIII.

DISTRIBUTION OF REASONS FOR JOINING CHURCH

Reasons for joining church	Boys	Girls	Total
Reading of S. S. Classmate	1	0	1
Conviction	4	16	20
Interest	0	2	2
Church Inherited	1	0	1
Home Influence	7	27	34
Revivals	2	1	- 3
Duty	2	4	8
Higher Ambitions	D	1	1
For Better Life	5	6	11
Advantage	0	2	2
Influence of Friends	1	0	1
Faith in God	1 1	õ	1
Associations	ã	1	Î
	24	RO	84

The above table for 84 distinguished pupils shows forty percent of the conversions due to home influence, and nearly twenty-three percent due to a conviction of conscience. It is very evident that the table does not correlate with the one given by Starbuck. Yet the table for this distinguished group is much as we might expect when we consider the family conditions. Their chances for a normal conversion are certainly far above the average.

TABLE XXXIV.

DISTRIBUTION OF CHURCH ACTIVITY.

Active in Church work	Boys	Girls	Total
Yes	23	58	81
No	W.	10	14
	27	68	95

The following table shows the distribution of church membership. It is to be noted that the distribution shows them to be affiliated with prominent organizations. There is scarcely any tendency toward being led by isms; this, however, might well be expected from an exceptional group of students.

TABLE XXXV.

Distribution of Church membership	Boys	Girls	Total
Methodist Episcopal	8	26	34
Church of Christ	1	10	11
Reformed Church	0	1	1
Baptists	1	5	6
Presbyterians	2	12	14
Ev. Lutherans	3	2	5
Congregationalists	2	4	6
German Lutheran	2	1	3.
Church of God	1 .	0	1
Episcopal	2	0	2.
Free Methodist	1	-0	1
Catholic	1	5	В
United Brethren	2	1	3
Jewish	0	1	1
Christian Science	1	Ō	1
	27	68	95

# COLLEGE AND LIFE PLANS.

Every young person faces the question of a life work with a greater or less degree of seriousness. In former years the question was very simple and did not demand a great deal of consideration. In our present age, it has become a very complex problem.

It is very evident that whatever the profession or vocation chosen, the individual must be prepared to meet the demand of that profession or vocation. Schools are

everywhere meeting the demands as readily as possible. and there is little lack for educational opportunities. The vital point then to the question is, the choice that the . individual makes. The misfit in life comes when the individual has made the wrong choice. Many good farmers have been laid on the altar of sacrifice in order to be made into poor preachers. It is not so much a question of the relative importance of any of the professions or vocations as of assisting the individual to find the profession or vocation to which his natural abilities are adopted in order that the individual will be a success in his chosen field. Until of late, almost any fanciful advice or surface feeling of the individual might be responsible for a life choice. At present the requirements of school courses function in a large way, and doubtless we are on the verge of a vocational guidance era, such as will enable the majority of young people to find their rightful calling.

In reference to the following table, it is to be observed that more than fifty-five percent have selected the profession of teaching, which is a natural thing to expect of those who have been leaders in their classes in the matter of successful intellectual work. Perhaps no other profession offers a greater opportunity for efficiency in social service than that of teaching.

The table shows that the natural drift of these exceptional students is toward that of leadership. The main trend in the educational world in the past decade has been to look toward special work and provisions for those who fall below the average mental ability. May we not ask, why not give some attention in a special way to those who have super-ability, and train them along the line of their natural bent as 'leaders of society.'

TABLE XXXVI.
DISTRIBUTION OF PROFESSIONS SELECTED.

Professions selected	Boys	Girls	Total
Teachers	3	50 .	53
Civil Engineers	2	0	2
Chemical Engineers	2	0	2
Electrical Engineers	2	1	3
Stenographers	. 0	2	2
Medical	0	3	3
Lawyers	3	2	5
Business	1	1	2
Consular Sec'y.	1	O	1
Engineers	1	0	1
Musicians	0	4	4
Architects	1	0	1
Secretarial	0	- 1	1
Readers	0	1	1
Agricultural	2	0	2
Ministers	1	1	2
Librarians	0	2	2
Pharmacy	1	0	1
Dramatic	0	1	1
· Veterinaries	1	0	1
Forestry	1	0	1
Scientists	1	1	2
Banking	1	0	1
Book-keeping	1	1	2
	25	71	96

TABLE XXXVII.
TABLE SHOWING NUMBER WHO HAVE MADE LIFE PLANS.

Plans for life	Boys	Girls	Total
Yes	25	71	96
No	10	11	21

Table XXXVII shows that eighty-two percent of these distinguished students have definitely decided a life work. This might very well be expected from those who have excelled in high school work.

TABLE XXXVIII.

TABLE SHOWING COLLEGES SELECTED FOR ATTENDANCE.

Colleges selected	Boys	Girls	Total
Illinois University	NA 11	7	15
Charleston Normal	O	2	2
Normal	0	5	5
Northwestern	1	10	11
Business College	1	2	3
Washington U	0	1	1.
Hedding College	0	3	3
Knox College	1	O	1
Mt. Holyoke	0	1	1
Jas. Millikin	4	1	5
U. of Chicago	1	D	1
Carbondale Normal	1	0	1
Jacksonville	0	1	1
Gem City	10	1	1
Monmouth	0	1	1 1
Eureka	10	1	1
Chicago Primary	1	0	1
Rockford College	i)	2	2
Cornell University	1	0	1
Beloit College	1	0	1
Dartmouth	1	0	1
U. of I	0	1	1
Bradley	1	0	1
Shurtleff	10	1	1
Undecided	4	20	24
None	9	22	31
	85	82	117

According to the above table, seventy-four percent of these distinguished students intend to go to college. Nearly seventy percent of those planning for college work have already decided upon a college for attendance.

## RURAL SCHOOLS.

The reports upon the rural schools were prepared by Miss Caroline Grote of the McComb Normal School, Mr. Joseph H. Hill, former president of the state normal school at Emporia, Kansas, and Mr. Edgar Packard of the state normal university, Normal, Illinois. The following outlines were prepared and used by the surveyors, not with the expectation that the reports would be uniform in nature and content but for the purpose of calling attention to some things that should be considered in the reports.

# ILLINOIS SCHOOL SURVEY

A COOPERATIVE INVESTIGATION OF SCHOOL CONDITIONS AND SCHOOL EFFICIENCY, INITIATED AND CONDUCTED BY THE TEACHERS OF ILLINOIS IN THE INTEREST OF ALL THE CHILDREN OF ALL THE PEOPLE

### THE RURAL SCHOOLS

Instruction FORM B

School	
By whom reported	
Number of school district?	
Number of children enrolled?	
Number of children belonging?	
Number of children in attendance?	
Number of children in district of school age.	
Boys 9	
Girls?	
Number of children from six to sixteen not in school.	
Boys ?	
Girls ?	
Number of sittings ?	

- I. Conditions affecting instruction.
  - The organization and management of the school.
     a. General appearance and condition of the school.

(1)	Condition of the blackboards: clean, work partly
(2)	erased, old work left on boards
(4)	sloven, plain, ornamental (unnecessary flourishes)
(3)	Blackboard ledges and erasers: clean, full or partly full of chalk dust
(4)	Floors: well sealed, clean, recently scrubbed, dirt
151	in corners or under desks, food upon floor
(5)	Walls: clean, dirty, smoke-begrimed, pencil-marked, cuts with sharp instruments, paper loose, paper dis-
(6)	colored, holes in plaster
	in corners, holes in plaster
(7)	Windows, clean, curtained, blinds in good or bad condition
(8)	Cloak-rooms: One hook for each pupil, children's
	wraps properly arranged, enough space for dinner
(9)	pails, used in part for store room
(-)	or poor repair
(10)	Desks: varnished, pencil or knife marked, ink-
	stained
(11)	Teacher's Desk: books and papers orderly ar-
(10)	ranged, disorderly arranged
(12)	Pupils' books: clean, thumb-marked, pencil marked, corners of leaves turned down, well ar-
	ranged in the desks
(13)	Location of water bucket, of library, of diction-
(14)	Provisions made by teacher for ventilating the
` ′	room
(15)	Were temperature and humidity conditions excel-
	lent, average or poor?
	ails of school room routine.
(1)	Monitorial work.
	(a) Passing of wraps
	(b) Passing of supplementary books, etc
(9)	(c) Passing of working materials
(2) $(3)$	Number who pass to the water bucket?  Number who leave the room? Total number of
(0)	minutes absent from the room
(4)	
	Number of minutes required to get pupils into
( )	seats after last bell sounds: Morning?

b.

			After morning recess Afternoon
		(6)	Afternoon recess
		(0)	(indicate class, as third grade and the number of
			pupils in it) to blackboard ready for work
		(7)	Position of pupils at the blackboard after their
		(0)	work is completed
		(8)	Actual number of minutes required to get each class from seats to recitation seat. (indicate num-
			ber of pupils by classes)
		(9)	Actual time required to get them from the recita-
			tion seat back to their own seat ready for work
		(10)	7
		(10)	Do pupils rise quickly when called upon to recite? Do they rise uniformly upon the same side of the
			seat?
			seat?
		(11)	Number of cases of tardiness—
			Excused Unexcused
			First week
			Second week
			Third week
			Fourth week Fifth week
			etc.
		(12)	Total number of days of absence during last
			month?
		(19)	Excused
		(13)	Teacher's record book or register: Well kept? Poorly kept?
		(14	) Is the teacher initiating any new routine? If so,
		(	describe the method employed
(	3.	The	daily programme.  Is it posted?In a conspicuous place?
		$\binom{1}{2}$	Is it followed?Note lapses
		(2)	15 10 10110 WOUTH, 11 10 10 14 pbcb
		(3)	Number of daily recitations?
		(4)	
			If not, give the distribution of the subjects accord-
		(5)	ing to the number of recitations
		(5) $(6)$	Number of study periods provided for each class:
		(-)	Third grade 4th 5th 6th 7th
			8th
			-9

	(7)	Time devoted to recesses and intermissions?
	` ′	Total time devoted to actual school work?
	(8)	Nature of opening exercise?
d.	Cour	se of study.
	(1)	Is Illinois course of study followed?  If not, why not?
	(2)	If not, why not?
	(3)	What attempts are made to adjust the materials of
		the curriculum to community needs or to use com-
		munity activities as a basis for the course of
		study?
₽.	Scho	ol Government.
	(1)	Mode of Control employed: Appeal to personal
		interest, made of absolute authority (coercive con-
		trol through personal influence and appeal of the
		teacher, mode of social appeal (pupil government)
	(2)	
		ing frequency of occurrence, if possible: whisper-
		ing, notewriting, the throwing of articles, teasing,
		impudence, whining, defiance, cheating, tattling,
		impudence, whining, defiance, cheating, tattling, fighting, obstinacy, lying, cheating, eating in
		school, dragging the feet, troublesome laziness,
		school, dragging the feet, troublesome laziness, failure to hear directions, truancy, moving about,
		etc., etc.
	(3)	
		of the above during the past month
		(a) Undesirable: Tasks, personal indignities, de-
		priving of earned marks, saturation (repeat-
		ing the offense in the presence of the school)
		sarcasm and ridicule, opprobrious epithets
		Give instances
		public or school opinion, restitution for acts
		of vandalism, suspension, corporal punishment,
		appeal to higher authority, serious private
		talk, expulsion. Give instances
	(5)	The system of rewards and privileges, if any,
	(0)	practiced
	(6)	In relations with pupils does teacher appear
	(0)	(check)
		to stimulate to suppress
		to win cordial co-operationto antagonize
		to be sympathetic harsh
		strictlax
		even tempered irritable

	reasonable	unreasonable
	tolerant	intolerant
	dignified	undignified
	courteous	rude
	encouraging	nagging
	firm	weak
	tactful	blundering
	enthusiastic	
	quick to react	slow to react
	quiet	
	systematic	
	resourceful	dependent
(7)	Is the teacher	
, ,	vigorous	weak
	poised	
	neat	
	at ease	embarrassed
(8) Ar	e pupils	
(0)	obedient	disobedient
	respectful	
	loyal	disloval
~ '	well-bred	ill-bred
	industrious	
	happy	
	quiet	
	courteous to each other	
	co-operative	
	careful	
(9) H	ow many of the pupils are en	gaged in activities not
(0)	connected with their assigned	d work?
	Do these activities disturb of	
(10)	What seems to be the most	
(10)	turbance?	
	Does the teacher try to corr	
	is she aware of it and does n	
(11)	Number whose disturbances	are willium
120	Accidental?	
(12)		ary rules treated indi-
	vidually?	

# II. INSTRUCTION.

(Fill out the essential features of this part of the outline for each lesson observed.)

(1) Th	ne Recitation					
a.	In what subject			,		
b.	The particular unit o					
c.	Preparation of the a quate or inadequate	Preparation of the assignment of the teacher: adequate or inadequate				
d.	Teacher's aim in rec	itatio	n: de	finite, cle	ear, concisely	
e.	Was the recitation a recitation, or a que					
f.	What precautions were To revive lagging a What proportion of tion?	ttenti f the f the	on ?	gave sus	tained atten-	
g.	Number of pupils in to be interested energeticindependent		i	indifferer lazy		
h.	Responses of pupils: fluent topical recit word or phrase responses incoherent response failing to answer.	ations conses			-	
i.	Number of pupils ask pertinent questions relevant thought-pr	of fa				
k.			0 1			
	THE RESERVE THE RE	Yes	No	No.Min.	Illustrations	
Dismiss	classsing classuting materials					
	nct speech of teacher					
Indisti	nct speech of pupils					
	ssary talking of teacher					
Unnece	ssary talking of pupils. to have devices ready					
	ill-adapted devices					
	ing questions					
Repeat	Repeating pupils' answers					

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Teaching ability as shown by
 Extent to which teacher's questions are (check)

		Almost	In part	Not
(a)	Thought provoking	WHOIIY	In part	at all
(b)	Thought-provokingcalling for facts			
(c)	suggesting the answer			
(6)	suggesting the answeranswered by "yes" or "no".			
(e) :	irrelevant			
(f)	not definite—vague			
	2. Extent to which material (a) confined to text (b) within pupil's comp (c) related to children's l (d) adapted to children's (e) worth while 2. Extent to which the teach (a) is rambling (b) is formal, mechanica (c) stimulates initiative (d) requires independent (e) develops pupil's reson (f) requires cooperation (g) is fixed on essentials (h) required pupils to or (i) utilizes children's ex (j) clears up pupils' dif (k) shows use of material future problems (1) time used by teacher	rehension lives and s present ling ll of pupils thinking urcefulne of pupils ganize m perience. fficulties. l in solut	experien or futu	cesre needs
	by pupils?4. Did the teacher uniformly		l English	9
	If not, give examples			
m.	Correction of essential errors			
	1. Describe method used			,
	2. Are non-essential errors to	oo much	emphasiz	ed ?
	3. What record is kept of			
	retard progress of pupi			
0.	Is general tone of classroom or indifferent?			
p.	Is the recitation marked by a			
	it have periods of depressi			

	Do en Is te	the latter, what appears to be the cause of each? oes the teacher take advantage of any specific notion appearing in a particular pupil? there an apparent lack of sympathy between acher and pupils?
	q. Wha	t objective means are used to make the work con-
(0)	te	ete (pictures, maps, objects, demonstrations) by acher to attract and hold attention?
(2)		f instruction used in this lesson.
	a. Drill	
	(1) $(2)$	What was the material to be automatized? Was the attention of both teachers and pupils focussed upon the material to be automatized?
		How?
	(3)	How? Was the drill aggressive (quick, sharp questions
		and answers)?
	7.45	T. 1
	(4)	Number of minutes given to it?
	(5)	Did it seem fatiguing or exhilarating?
	(6)	Was the drill motivated ? Variety of
		devices used?
	(7)	Time used by teacher in exhortation?
	(8)	Number of repetitions,
	(9)	Were different points especially emphasized?
	(10)	What means were taken for the correction of
		mistakes?
		Of correcting inadequate habits?
	(11)	Apparent results secured in speed?
		In accuracy ?
	b. Prol	blem lessons.
		What was the main problem of the lesson?
		Was the recitation based upon a specific need or
	(-)	purpose felt by the children?
		What was the need?
	(3)	Was the aim immediate or remote?
		Did the children use this need as a basis for col-
	, (1)	lecting material? For selecting material? Give
		illustrations if possible ?
	(5)	Did the children exercise any initiative in using
		or applying the ideas gained?
		Give cases if possible?
	(6)	Was the class group, irrespective of the teacher,
	, ,	responsible for the choice of the problem?

	Was there any evidence that the class exercise (the report) was conducted or prepared independently of the teacher?
	(7) To what extent did the class determine what they should do next?
	(8) Were there any exercises in the work where the assistance of the teacher was indispensable?
	Note them
	(9) Was the procedure of the recitation systematic. Who was responsible for this, teacher or pupils?
	(10) How many relationships did the teacher make the pupils conscious of?
	(11) How many generalizations did she raise to consciousness?
	(12) How many applications did she point out?
	(13) Was there any evidence that the children were intellectually degraded because of the teacher's
	assistance?
c.	Review lesson.
	<ul><li>(1) What subject matter did the review cover?</li><li>(2) Was the review purely a repetition of materia</li></ul>
	(2) Was the review purely a repetition of material
	previously learned?
	Was the teacher prepared to conduct a systemator review?
	(3) Did it call for a reorganization of old material?
	(4) Did it result in summaries?
	(5) Were the pupils encouraged to prepare outlines
	and summaries upon the material themselves?
d.	Examination lesson.
	(1) Did the examination test for habits, the memory
	or the judgment?
	(2) If for habits, was the main purpose to test for skill, accuracy or form?
	(3) What proportion of the questions were factual
	that is calling for remembered knowledge?
	(4) What proportion of the questions called for the
	exercise of the organizing ability, the ability to
	interpret, the ability to apply, ability to see likenesses and differences, the ability to objectify
	or illustrate, the ability to detect fallacies ?
	(5) Were the questions so framed as to enable the
	teacher to check the answers quickly or was it
	necessary for her to read every word in every
	answer?

е.	Stud	ly lesson.
٠.	(1)	Was the study lesson used in connection with new
	(-)	or with old material?
	(9)	What was its purpose—to familiarize the pupils
	(2)	with a new way (mode) of working, to acquaint
		them with the importance of certain new material,
		to discriminate between essentials and non-essen-
		tials, to master a new terminology?
	(0)	Did the children show as the recitation proceeded
	(3)	that they acquired power in organizing and ap-
		that they acquired power in organizing and ap-
		plying?
	(4)	How much time was given to it?
	(5)	Were study questions used ? By whom
		prepared?
		prepared Results
f.		ignment lesson.
	(1)	At what time during the recitation period was
		it made?
	(2)	How much time was given to it?
	(3)	Was it definite? Clear? Doable?
	(4)	Was any child called upon to repeat it ?
	(5)	Did it show that it was progressively connected
	(0)	with the work that preceded or followed?
	(6)	Results: Did it lead to an effective and aggres-
	(0)	sive attack?
	(7)	Is there evidence that the teacher follows her
	(1)	assignments with some care!
	(8)	Was the assignment formal? from text
	(0)	book?
	(0)	Was it made by topics or problems or pages ?
	(10)	Percentage of time given to it?
	(11)	Does the assignment call for the exercise of any
	(11)	initiative on the part of the children?
	(12)	Did the assignment clear relatively insuperable
	(12)	difficulties and obstacles?
	(13)	How many individual assignments were made?
	(10)	
G-	- inl	
		Methods. s much of this part of the outline as the case de-
	mand	,
a.	Rea	ding.
	(1)	Length of the period?
	(2)	Which of the following methods were used in
		primary reading:

(3)

		Alphabetic? word sentence
		phonetic combination
	(3)	Give name of basal text used?
	(4)	Were the word drills and drills on the phono-
		grams in the early part of the first grade kent
		separate from the regular reading period?
	(5)	At what point in the child's school experience is
		phonic analysis taken up?
	(6)	How long is it continued?
	(7)	What proportion of the lessons during the first
		two months of the first year is silent reading les-
		sons? (consult teacher)
	(8)	In the intermediate and grammar grades reading
		to what extent are the auxiliaries or aids to
		reading employed?
		(a) Articulation and pronunciation drills
		(b) The dictionary
		(c) Dramatics
		(d) The committing of memory gems
	(9)	What effort is made to direct the private reading
		of the pupils?
	(10)	What supplementary material is provided for
		each grade?
		Is it used?
	(11)	Were the criticisms of the class directed to the
		mechanics of reading or were they of such a char-
		acter as to improve expression or thought get-
		ting?
	~	Give cases
o.	Spe	lling.
	(1)	Length of period?
	(2)	How many words were assigned for each grade?
	(3)	From what were the words selected?
2	(4)	
		Note violations
	~(5)	What attempt, if any, was made at teaching spell-
	(0)	ing incidentally?
	(6)	Method used; Column spelling, dictation exercises,
	15	composition?
	(7)	Did the teacher stress any of the following: dia-
	(0)	critical marks, syllabication, accentuation
	(9)	Were the children required to use the words in
		sentences?

( {	) What proportion of the emphasis was placed upon oral spelling?
	Upon written spelling?
(10	
77	
11	andwriting.
()	) Length of handwriting period?
	Were laws of habit formation observed
`	Note violations
. (4	) What proportion of the pupils received individual
	help?
(5	Were good form of letters, correct spacing, good alignment, and adequate arrangement observed?
(6	b) What details needed forther treatment: size of
	letters, uniformity in size of letters, vertical
	alignment, horizontal alignment, spacing, etc?
	rithmetic.
	.) Length of period?
(2	
	drill work? Upon giving new problems illustrating old principles? Upon prepar-
	ing the way or removing the difficulties of new
	work to come? Upon testing the children
	upon the assignment? Upon the prepara-
	tion of original problems by the children ?
(3	b) Did the children work by rule or was there a
	conscious attempt to develop the rule ?
(4	) Were the children expected to verify (check)
	their answers?
(5	) Was accuracy of statement as well as accuracy of solution required?
(6	) Relative proportion of oral and written problems
17	used?
(8	() Was the text book slavishly followed?
(0	the solution of every problem?
(9	) Was emphasis placed upon any of the following
	topics: greatest common divisor, least common
	multiple, troy weight, apothecaries' weight, circu-
	lating decimals, annual interest, equation of pay-
	ments, cube root, progression, compound propor-
	tion ?

d.

	(10)	What games, if any, were used in the primary grades for fixing fundamental arithmetical con-
		cepts ?
	(11)	Were solution of problems placed on board?
	1.	Were all problems explained without regard to
		didfficulty?
	~	
3.	Geo	rgraphy.
	(1)	Length of period?
	(2)	Length of period?
	` '	gengraphy?
		geography? Or upon a study of type forms?
		Or upon a study of type forms?
		Or upon the verification of physiographic prin-
		ciples?
	(3)	To what extent, if any, was the text book sup-
	` '	plemented?
	(4)	Was there any attempt to have the recitation pro-
	(1)	ceed in the following order: statement of aim
		ceed in the following order. Statement of aim
		and collection of data, restatement of principles
		underlying data, inferences, verifications?
	(5)	Was the recitation of an examination sort where
		the children answered in terms of the text book
		or was the text book used as an authoritative
		basis for confirming or refuting the validity of
		the judgments reached by a study of maps—flat
		the judgments reached by a study of maps—nat
		maps, relief maps, colored maps, isothermal maps,
		etc?
	(6)	Was each geographical fact taught in isolation,
		or with reference to its influence upon man and
		of man's influence upon it?
	(7)	Was there any conscious attempt to select certain
	(.)	minimum essentials and to insist upon their
		mastery?
f.	Hist	ory.
		Length of times given to it?
	(2)	Did the teacher emphasize events or movements?
	(-)	
	(2)	What devices were used for the purpose of mak-
	(9)	what devices were used for the purpose of mak-
		ing the period or the event concrete, that is to have the children see, hear, and feel in terms of
		have the children see, hear, and feel in terms of
		the historical characters themselves?
	(4)	Was the text supplemented? To what
	( )	extent?
		Were the children encouraged to supplement it?
	(5)	
		What source material, if any, was used?
	(6)	Were casual relationships emphasized?

	(7) Did the teacher try to point out moral and ethical implications?
	(8) Was she more interested in men (characters)
	than she was in forces (movements)?
g.	Language and Grammar.
	(1) Length of recitation
	(2) In the language lesson what was emphasized:
	choice of topic, choice of words, punctuation, margins, indentations, spelling, grammatical
	form, facility and freedom in expression, clear-
	ness in expression, unity and coherence in ex-
	pression
	(3) What part of the recitation in language was
	based upon topics that the children should be
	able to write or speak about
	What part was based upon a regular text?
	(4) What grammatical errors did you discover that appear to be matters of habit?
	(5) What effect did the correcting of mistakes have
	upon the individual corrected?
	Upon the class?
	(6) How frequently were written language exercises
	required !
	(7) Were the compositions read, corrected and re-
	turned?
	What was done with them?
	(8) Was formal grammar taught in the seventh and eighth grades?
	Text used?
	Number of recitations per week given to it?
	Length of each?
h.	Report of typical lessons, especially those aspects that
	illustrate phases of methods not indicated by the
	preceding outline.
1.	In your opinion what subject was most poorly taught?  In your opinion what subject was best taught?
	In your opinion what subject was well taught?
	SPECIAL QUESTIONS FOR TEACHERS
	of Teacher.
ŭum Vum	ber of years in high school
	ber of years in normal school
VIII)	ber of years in college or university

1. Train

2.	Experience.
	Total number of years taught
	Total number of different schools taught in
	Total number of years in present school
3,	Special interest in rural life.  How displayed
4.	Evidence of professional interest as shown by meetings attend
	ed, professional magazines subscribed for, and books read
	during last school year

5. Remarks.

### ILLINOIS SCHOOL SURVEY

A Co-operative Investigation of School Conditions and School Efficiency, Initiated and Conducted by the Teachers of Illinois in the Interest of All the Children of All the People

### THE RURAL SCHOOL

The School Plant

# FORM A

School.	County	
By who	m reported	
	of school district?	
	of children enrolled?	
Number	of children belonging?	
Number	of children in attendance?	
Number	of sittings?	
	Boys	
Number	of children in district of school age:	
	Girls	
	Boys	
Yumban	of children from six to sixteen not in school:	•
Number	Girls	
	OHIS	•
1.	SITES. Dimensions and areas of sites.	
0.	School sites low and wet or dry and well situated.	
	Frontage and exposure.	
3.	Total areas occupied by buildings?	
4.	BUILDINGS—Years since building was built? (Approxi	
٠.	mate, if necessary)	
5.	Cost? (Approximate, if necessary)	
6.	Construction—Frame, brick, stone, concrete	•
7.	Are good basements provided?	
8.	Number of stories in each building, not including base	
	ment?	
9.	Number of school rooms?	
10.	Number recitation rooms?	
El.	Floor space in school rooms?	
12.		A.
	Floor space per pupil enrolled?	
	Floor space per pupil enrolled?	•
13. 14.	Floor space per pupil enrolled?.  Height of ceilings from floor?.  Cu. ft. per room?	

16.	Porch in front?
17.	Outside fuel rooms?
18.	General condition of fuel rooms?
19.	Are cloak rooms provided? One or two?
	MATERIAL, EQUIPMENT AND SUPPLIES
20.	LIGHTING—windows, one side, opposite sides, or one
20.	side and end of rooms?
21.	Are windows in front of children?
22.	Windows at pupils' right or left side, or both sides \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
23.	Height of base of windows from floor?
24.	Rooms with south exposure?
25.	Distance from top of window to ceiling?
26.	Distance of nearest window to front of room?
27.	Ratio of window area to floor area?
28.	Are rooms lighted by windows in ceiling?
29.	Window shades: material, cloth, wood, color?
30.	Shade roller: stationary or adjustable?
31.	Artificial lights: electric, number and kinds, direct or
	reflected?
32.	reflected?
	room?
	Oil lamps Number Location
33.	HEATING—Stoves, jacketed heater, hot air furnace with-
00.	out fan, hot water direct radiation, steam direct radiation,
	steam indirect radiation with fan?
34.	If fan is used, is it propelled by steam, by gas engine, or
54.	
0.5	electric motor?
35.	VENTILATION—By windows and doors only?
36.	If jacketed heater, is air taken from outside and foul air
	exit connected with flue?
37.	If gravity system how are foul air vents heated?
38.	Is plenum chamber and fan used?
39.	Quantity of air supplied?
40.	Quantity of air per pupil?
41.	How often complete change of air?
42.	Is air washed?
43.	If not, how is humidity secured?
44.	Is thermostat control used?
45.	Have all rooms good thermometers? Where placed?
46.	Have all rooms good thermometers? Where placed?  Area and height of fresh air inlet?
47.	Area and height of foul air outlets?
48.	Boiler inspection by whom? How often?
49.	Are the toilets in outhouses?
50.	To what extent are they separated? How far are they
ov.	from the school house?
	TION THE SCHOOL HOUSEY

51.	Are there good walks to both of them?
52.	Do the closets face each other?
53.	Are good screens built in front of the closets?
54.	Are the toilets well lighted?
55.	Are vaults light-tight?
əə. 56.	Well ventilated?
57.	How often scrubbed?Condition when in-
.) (.	How often scrubbed?
58.	spected: clean, unsanitary, filthy?
.)8.	No. of stationary wash basins?
=0	for each? (Answer based on enrollment)
59.	No. of toilet seats for boys?
	(enrollment)
60.	No. of toilet seats for girls?No. girls to each?
	(enrollment)
61.	Width urinal space in feet?
62.	How many times per year are school rooms thoroughly
	washed and scrubbed?
63.	How many times are windows washed?
64.	How many times a year are walls cleaned or brushed
	down?
65.	Do janitors sweep in morning or evening?
66.	When do they dust?
67.	How often are feather dusters used?
68.	How many times a week are erasers thoroughly cleaned
	by janitors?
	Chalk ledges, blackboards washed?
69.	Are rooms fumigated during contagion? How?
70.	Is a rest room supplied and equipped for emergencies?
71.	In heating and ventilating is all air taken from outside?
	Below ground level? At ground level? 30 ft. or more
	above ground level?
72.	Total blackboard area in sq. ft. per pupil based upon
	largest class? Is dustless crayon used? Height of black-
	board-base from floor? Kind of blackboard: wood, plas-
	ter, composition, slate Color
	Condition
	Can warm food be provided?
74.	Is there adult oversight of rooms during lunch
75.	Number of adjustable desks? Of non-adjustable
	desks? No. single desks? of double desks?
	Number of pupils in seats too largetoo small
76.	Are the following furnished: Cooking materials, the
	value; sewing room, No. of machines;
	No. pupils to machine; Value equipment;

	Manual training—benches; No. boys to bench
	; Value benches and tools; Value per
	boy in school
7.	Total No. books in library No. books per child?
	Classify by classes
78.	No. books of fictionNo. per child per class
79.	No. books of science?No. per child per class
80.	No. books of history and biography? No. per
	child per class
81.	No. books of music in library?No. per child per
	class
82.	No. sets supplementary readers of all kinds? No.
	pupils per set?
83.	No. reference books (except dictionaries)? No.
	per child per class
84.	No. magazines and newspapers subscribed to?
	No. per pupil
85.	No. wall maps?No. pupils per map?
	No. of globes?
86.	Total no. framed pictures on walls?
87.	No. of dictionaries? Kind
88.	SOURCE OF WATER SUPPLY. Driven well, curbed or
	enclosed wall? Open well, spring. Distance of well or
	spring from school building? From water closet? From
	nearest stable? Is well thoroughly cleaned before the
	opening of school in the fall?
89.	Drinking facilities. (a) Pail and common drinking cup.
	(b) Pail and individual cup. (c) Faucet and common
	drinking cup. (d) Faucet and individual drinking cup.
	(e) Pump and common drinking cup. (f) Pump and
	individual drinking cup. (g) Pump with bubbling foun-
	tain
90.	COMMUNITY USES. Is building used for a community
	center? To what extent?

## THE ILLINOIS RURAL SCHOOL SURVEY.

## Caroline Grote, Macomb, Ill.

That the rural school problem has not been solved is true beyond a doubt. Perhaps it has not even been correctly stated as yet. A score of years has witnessed heroic efforts to understand and state the problem and to work out its solution. There have been times and localities in which the cry "Eureka" seemed not out of place, but all too soon it was discovered that the cry was premature, that important factors had been overlooked, that surface features were deceptive, that deep underlying causes which were not clearly comprehended were at work, and that it takes more than paint and building and playgrounds, important as these are, to make a good school.

Into a field into which many have entered and from which some have brought forth rich harvests and others have brought but little, I fear to enter. I can hope to add very little, if anything, to the field of knowledge, but having assisted in the work of the rural school survey of Illinois, it is necessary to report my findings and some of the conclusions I have drawn therefrom.

Too much stress has not been laid on the externals of the country school, for these can not be over-emphasized, but not enough has been laid upon the kind of teaching, the teacher, the fundamental principles of teaching, and preparation for the work of teaching. We have learned to say that the rural school teacher should be a leader, and this is true, but she must first of all be a teacher. She must understand the child and the child mind and know how to develop these. We have come dangerously near to forgetting the real work of the school in our enthusiasm for the higher sounding phrase of community leadership. We have forgotten that the

girl of from eighteen to twenty who goes into a rural community for the first time, who has had little or no experience away from home, who is probably away from home for the first time, to whom falls that most difficult of all school tasks, organizing, classifying and grading a country school, we have forgotten that this girl can best lead the community through her school. Some enthusiasts would have her lead the community first and then teach, if time is left, but teaching, bringing to the boys and girls the richest, fullest measure of all that is good and beautiful and true and preparing them to receive and comprehend it, is her first duty.

Until a year ago I had allowed myself to believe that great progress had been made in the rural schools of Illinois. The high standard established by the State Department of Public Instruction for recognition as Standard and Superior schools and the number securing such recognition, as well as the fact that students coming to our Normal schools were improving in type and strength, had led me to believe that a half-score of years had worked wonders, but I was dis-illusioned by my observations of a year ago.

In the work of the Illinois School Survey it, fell to my lot to make a survey of the rural schools of the Military Tract. As there are eighteen counties wholly or partly in this territory and an aggregate of more than three thousand schools, it was manifestly impossible to visit them all. The following plan was adopted: An effort was made to secure the coöperation of the county superintendents of these counties. In most of them the county superintendent was asked to select for visitation his best school, his poorest school, and two of his average schools, the basis of selection being the building and its equipment and the interest manifested by the community in its school. The teacher was not to be considered primarily but there is little doubt that in this way

of handling the matter, the teachers visited were at least as good as the average of the county.

An average of a half-day was spent in seventy-four schools of the Military Tract and in four schools of an adjoining county. (Six schools were visited in one county.) This made seventy-eight in all. As a rule the teacher did not know the visitor was coming. In a few counties the county superintendent accompanied the visitor. Two syllabi prepared by the Director of the Survey and the state normal school presidents were followed in noting conditions. These appear in connection with this report. It is the purpose of this report to give the results of this investigation and the conclusions drawn therefrom.

The total enrollment of these schools was 1,605, an average of 20 and 15/26, a very good average enrollment as rural schools now go. The total attendance on the days visited was 1,302, an average of 16 and 9/13, which is 81 and 13/107 percent of the enrollment. This is not a good per cent of attendance. It seems altogether too low. It is true the weather was very unfavorable on some of these visiting days, but it was not bad enough to keep the visitor at home.

The reports show that seventy-six children of from six to sixteen were not enrolled in the schools. A few of these were attending neighboring high schools and a few were attending paroachial schools, but at least fifty could not be accounted for in either of these ways. Plainly the compulsory school attendance law was not strictly enforced. Questioning revealed the fact that directors are unwilling to antagonize their neighbors by enforcing disagreeable laws.

### GENERAL APPEARANCE AND CONDITION OF THE SCHOOLS.

Buildings generally had improved in appearance. For the most part they were well painted and had good

walls, were fairly well papered, but often too dark. Sixty schools had slate boards, fifteen had some kind of plaster or composition, and three had wooden boards painted black, a relic of two generations ago.

Blackboards were generally fairly clean, work was usually erased, the work on the board was quite neat, and ledges and erasers were fairly clean, but in sixteen

schools the ledges were full of chalk dust.

Floors were fairly well sealed and as a rule had been scrubbed in the fall before the opening of school. quiry revealed the fact that except in cases of rare energy on the part of the teacher, rooms were not scrubbed oftener than once a year. Neither were they well swept. Dirt in corners and under desks, and food upon floors menaced the physical and spiritual health of the children. Sweeping was often done in the morning, making the dusting a worse than worthless piece of work. Many teachers showed little or no pride in the way they kept their school rooms. For the most part they did their own janitor work. When not, it was intrusted to one of the older boys who was too immature and too untrained to do efficient work and did not care and, in addition, resented being told how to do things. The teacher who boarded at home, some five or six miles away, had little time or disposition to show him how to do his work or to add the finishing touches which would convert a poorly kept room into a place of comfort and perhaps beauty.

In a number of the schools smoke-begrimed walls and ceilings, loose and discolored paper, dust-laden blackboard ledges and erasers, all furnished happy hunting

grounds for disease germs.

Windows even in the best of the schools were seldom washed and curtains lacked brightness and freshness.

In forty-one schools pupils' desks were in good condition, being varnished and not badly scarred. The other thirty-seven were marred with pencil or knife and badly stained with ink.

Teachers' desks were orderly in sixty-seven schools, in eleven they were quite disorderly.

· Water pails were in the rear of rooms or in the halls.

#### CLOAK ROOMS.

Of the seventy-eight schools, twenty-five had no cloak rooms, twenty-six had one, and twenty-six had two, while one had lockers in alcoves to either side of the vestibule. This means that in twenty-five of these schools cloaks and wraps of all kinds and overshoes were taken care of in the school room proper. Usually they were piled high on one or two desks near the stove. Rubbers and overshoes were tumbled around near the stove and added to the disorder and confusion. The steam arising from the wraps and poorly ventilated cloak rooms still further vitiated the dust-laden atmosphere. Dinner pails in some of these schools adorned the windows or the floor and the desks near the stove.

### AGE AND CONSTRUCTION OF BUILDINGS.

The average age of the school buildings was thirtysix years. This very fact goes to show that the school architecture belongs to a former generation, some of it to the generation of our grandfathers. It must not be forgotten that this is the average of the best, the poorest, and of two average schools of each county. The plan followed doubtless gave a fair average. Five of the buildings were more than sixty years old, fifteen were between fifty and sixty, and only six were built during the past decade, and of these only three were modern in construction. Fortunately the new sanitation law will make it necessary to improve these buildings or to replace them with others furnishing better school room conditions. The estimated average cost of the buildings was \$900, that is, they could be constructed for that sum now. They probably cost very much less thirty-six

years ago. Sixty-six were frame, ten were brick, one was stone, and one was concrete. Seven had basements. Only one had more than one room and none had separate recitation rooms. Sixteen had less than three hundred cubic feet of space per pupil. Eleven had porches, only three of which were large enough to afford protection of any kind. Three had no fuel rooms of any kind, five had basement fuel rooms, ten had very poor outside ones, twenty-two had fair outside ones, one had one in the building, and thirty-seven had good outside ones.

#### SCHOOL GROUNDS.

School grounds were, generally speaking, not adequate for the enrollment. One school had two and one-half acres, two had two acres, three had one and one-half acres, seven had an acre, four had nearly an acre, five had four-fifths acres, five had three-fourths acres, twenty-six had one-half acre, four had nearly one-half acre, sixteen had one-fourth acre, four had nearly one-fourth, and one had only one-eighth acre. The sites were usually dry and well situated, but six were low and wet, six were on hill slopes, and four were crossed by public roads.

### LIGHTING.

Windows furnished the light. These were on opposite sides of the room in forty buildings, on opposite sides and one end in thirty-four, and on one side and in the rear in four. Thirty school rooms had no south exposure. In nine the distance from the top of the windows to the ceiling was one foot. It varied from fifteen inches to five feet in the others. None had windows in the ceiling. The ratio of window area to floor area varied from one-twelfth to one-fifth, by far the greater number approaching the former instead of the latter. Seventy-seven rooms had shades, one had none, and all

the shades were stationery. Forty-five rooms had from one to nine oil lamps, poorly cared for and giving evidence of very little use.

#### HEATING.

The heating of these rooms varied greatly. Six had hot air furnaces without fans, ten had jacketed stoves, forty-two had jacketed heaters, and, incredible as it may seem, twenty had the old fashioned stove in the middle of the room without jacket of any description.

### VENTILATION.

Ventilation was by doors and windows only, in the thirty rooms heated by stoves, in two having furnaces, and in two having jacketed heaters. In the other jacketed heaters, air was taken from the outside and the foul air exit was connected with a flue. Humidity was secured by means of a humidifier which was all too frequently empty. The Smith and the Waterbury systems vied with each other in popularity. A few Quakers and Heroes were found. Where these were large enough for the rooms they were to heat and the teachers exercised ordinary care in their use, their service was quite satisfactory.

### OUTBUILDINGS.

Toilets were all in outhouses. One school had only one outhouse, not a double one, but a single one, and one had a double one. This is to the everlasting disgrace of the districts in which they were located. All the other schools had two outhouses. Often these were not far enough apart, were too near the well or too near the building. Only nine pairs were screened and three pairs faced each other, the latter being very near each other at that. Lighting, ventilation, and good vaults were al-

most unknown in these outhouse. Three were fairly well lighted, two were fairly well ventilated, and one had a good vault. Only two pairs had good walks leading from the school building to them. In most districts the number of toilet seats was inadequate; in six it was not. The condition of the outhouses was frequently deplorable. In twenty-four districts one of the outbuildings was clean or fairly so, while the other was unspeakably bad. In many of these cases the teacher had never inspected the one used by the boys and was very much surprised when her attention was called to its use and abuse. In nine districts both outhouses were in a filthy condition. In one building the walls were badly scarred. In twenty districts both buildings were fairly clean. In twenty-two both were clean. In the two districts having only one building each, each was clean, the teachers evidently having made an effort to atone for the sins of the district in some small degree. The worst menace to the safety and decency of the district lay in the condition of these outhouses. Clearly the teachers were too young and inexperienced to attack this problem wisely.

### BOARDING PLACES.

The question of suitable boarding places for teachers proved rather serious. In many cases it was not the teacher's fault that she boarded at home or in a neighboring town. Suitable places were not easily found. People who have good homes and can give the teacher a good room and other comforts are usually unwilling to take her into their homes. Unfortunately there are three very good reasons for not doing so at times; namely, the housewife is overworked because she cannot get help in the country and so feels that she cannot add this additional burden to her list of burdens; it puts her in the light of needing to perform this service and she is unwilling to be considered in that light; and sometimes the

teacher does not appreciate what is being done for her and is exacting and fault-finding and will not conform to the family hours of eating, rising and retiring. Small wonder that the woman who has housed one such careless and ungrateful lassie is not willing to undertake the trying experience again. Naturally the young, inexperienced town or city bred girl can not meet the situation and she boards at home. Can she become a leader? It is impossible until she has a new birth, a larger vision, and a sympathetic understanding of her people, which she can not and does not get under these conditions.

#### COOKING MATERIALS.

Cooking materials were not furnished and warm lunches were not provided in any of these schools, though the teacher brought her own lunch too. One thing was gained by the latter and that was that the teacher was on hand during the noon hour but this hour was seldom made one of real benefit to the school.

### DESKS.

Three of the schools had adjustable desks but there was no evidence that they had been adjusted to their occupants. Indeed, one of the teachers was ignorant of the fact that those in her school were adjustable.

# LIBRARIES, MAPS, GLOBES AND PICTURES.

The following table shows equipment along these lines and gives some interesting facts, some of which will need interpretation, for things are not always what they seem:

	Number of Books in Library	Average per Child	Per cent Suited to Upper Grades	Per cent Suited to Lower Grades	Volumes of Fiction	Volumes of Science	History and Biography
1.	40 90	2 11 5 4 8 1 4 8 7 4 1 2 7 7 1 8 7 7 1 8 7 1 1 1 1 1 1 1 1 1 1 1	100		24 56 90 52 34 10 30 151 55 62	10	8 6 16 6 6 3 22 36 6 24 4 4 20 12 15 5 24 8 8 27 6 10 23 3 6 15 8 10 12 4 7 7 10 8 12 8 20 18 8 10 5
2. 3.	150	5	100 50 100 50 100 85 100 50 65 100 100 100 100 100 100 50 100 50 100 10	50	90	12 5 6	16
4.	150 90	ă.	100	00	52	6	6
5.	93 25 65 211	9	50	50	34	2	6
6.	25	1	100		10		3
7.	65	4	100		30	1	22
8.	211	8	85	15	151	13	36
10	72	W.	50	50	55 62	18	24
11.	104 72 165	12	50	50 50 35	88	5	20
. 12.	121 107 206	7	65	- 35	87	12	12
13.	107	7	100		50	15	15
14.	206	13	50	50	130	20	20
15.	115	7	100		88 87 50 130 75 50 15	9	18
17	50	2	100		15	10	10
18.	50 58	7	100		10	17	22
19.	93	10	100		80	3	5
20.	130	7	100		80 78	16	24
21.	93	4	50	50	50	3	28
22.	69 254	15	100	E 0	22	4	38
24	221	17	50	50 50	191	49	36
25.	100	5	100		60	. 8	10
26.	117	6	100		53	21	23
27.	100 117 90	11	50	50	50 22 137 131 60 53 66 97	6	6
28.	150	13	50	50	97	· 12	15
29.	150 114 135 126 122	6	100		84 95	12 15 20 9 10 15 17 3 16 3 4 50 42 8 21 6 12 10	10
31	126	D R	50	50	74	10	10
32.	122	5	50	50	96	10	4
33.	91	7	100		57 40	14	7
34.	90	7	100		40	15	10
35.	90	4	100		60 80	10	8
4. 5. 6. 7. 8. 9. 11. 12. 13. 14. 15. 16. 17. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 30. 31. 32. 38. 34. 35. 36.	90 110 60 150 117	6	100 50 50 100 100 100 100 100 80 100 100		80	14 15 10 12 8 20 22	12
37.	150	2	100		90	20	20
39.	117	8	80	20	50	22	18
40.	36	ĩ	100		10	8	8
41. 42.	36 160 25	8 1 6	100		10 90 50 10 120	8 20 6	10
42.	25	1	100		11	6	5

LIBRARIES, MAPS, GLOBES AND PICTURES-Continued

	Number of Books in Library	Average per Child	Per cent Suited to Upper Grades	Per cent Suited to Lower Grades	Volumes of Fiction	Volumes of Science	History and Biography
43.	204	8	80	20 20	104	18 20 12 35 4 4 10 16	30 22 12 12 14
<b>44</b> . <b>45</b> .	140	9	80	20	80 40	20	22
45.	140 76 105 26 20	9	80 100		40	12	12
46.	105	6	100		44 8 6	35	12
47.	26	1	100		В	4	3
48.	20	1	100 50 100		6	4	4
49.	24	1	50	50		4	4
50.	50	4	100		10 43	10	10 14 15 20 51
51. 52. 53.	80	2	100		43	16	14
52.	60	1	100		30	5 30 15 8 10	15
53.	130	5	100		70	30	20
54.	126	2	100		40	15	51
54. 55. 56. \$7. 58. 59.	141	7	100 80 50	0.0	81 70 91 110 98	8	18
56.	80 126	11	80	20 50	70	10	11
57.	120	11	50	20	91	10	11 20
58.	160 120	13	80 100	20	110	0	Z 0
59.	60	11	100		40	10	
60. 61.	89	9	100 50 100	50	40 65 36	10 10	5
01.	671	70	100	30	26	IU	2
62. 68.	40	7	100		24	8	4 5 8 7 2 7 20 6
64.	20	7	100		19	2	9
65.	20 50	2	100		12 32 158 55	3	7
66.	225	5	60	40	158	20	20
67.	90	2	100	*0	55	20	6
68.	8	146	100 60 100 100 100		00		· ·
69.	125	- G	100		86	20	4
70.	73	Ä	100		60		3
71.	82	2	100		28		
71. 72.	32 180 117	20	100 100 100		60 28 150 99 56	10	20
78.	117	9	100		99		B
74.	80	5	100		56	2	6
75.	48	899511142152711161344172522995275	100		24		12
76.	102	7	100		422	16	10
77.	165	5	100 100		42 68	14	10 32 12
78.	102 165 101	4	100		30	14	12
	7920				4708	821	1023

### LIBRARIES. MAPS, GLOBES AND PICTURES-Continued.

Musio Books	Supplement- ary Books	Reference Books	Diction- aries	Maga- zines		Maps	Globes	Pict- ures
1. 2. 3. 4. 5. 6. 7. 8.		8 15 39	8 24 26 12 12 12 12	1 1 2 1 1 1 1 8		8 8 8 9 6 0 2 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 1 1 1 1 1 1	2 8 6 5 4
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 21. 22. 23. 24. 25. 26. 27. 28. 33. 34. 35. 36. 37. 37. 37. 37. 37. 37. 37. 37. 37. 37		40	8 8 24 26 12 12 12 12 12 10 16 11 12 12 12 12 12 12 12 12 12 12 12 12	1121111812141511111111111113116111112211111111111111		5 5 5 5 12 7 9 8 5	1 1 1 1 1 1	1 10 10 2 8 2 8 2 6
18. 19. 20. 21. 22.		28	12 12 12 5	1 1 1 1		5 6 5		14 8 6 8 4
25. 24. 25. 26. 27.	10	26	12 12 12 20 12	1 1 1 1		7 6 5 5	.1 1 1 1 1 1 1 1 1	
28. 29. 30. 31.	12	5 12		3 1 1 6	-	4 2 4 5	1 1 1 1	2 7 4 2 5 8 5 6
33. 34. 35. 36.		3	10 25 12 6	1 1 1		9 6 6	1 1 1 1	5 6 1
37. 38. 39. 40. 41. 42.		14 17	20 20 10 10 10	1 2 2 1 1		6 6 5 8 2	1 1 1 1 1 1 1 1 1	3 6 1 5
43. 44. 45. 46. 47. 48.	7	37 6 10	10 25 12 6 20 10 10 10 11 3 8 12 12 12	1 1 1 1 1		9666665825466651	1 1 1	2 1

LIBRARIES, MAPS, GLOBES AND PICTURES-Continued.

Music Books	Supplement- ary Books	Reference Books	Diction- aries	Maga- zines	Maps	Globes	Pict. ures
49.		16		1	6	1	1
49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 69. 60. 67. 68. 69. 70. 71. 72. 73. 74. 75.	20		20 7 10 20 14	1 1 2 1 1	1 10 6 13	1 1 1 1	2 1 7
56. 57. 58. 59. 60. 61.		8	14 30 12 6	1 1 1 1	9 2 7 14 5 8	1 1 1 1	6 7 6 2
62. 63. 64. 65.	. 16		14 B0 12 6 10 B 8 11 M9 6 15	1 1 1 1 1 1 6 1	8 2	1	10 6
67. 68. 69. 70.	,		5 15 10		10 5 9 5 8 8 1 13 13	1 1	7 1 4 1
72. 73. 74. 75.		. 6	12 10 12 30 51 40	8 7 1 1 1 1 5 5	. 8 8 5	1 1 1 1	5 5
76. 77. 78.		5	30 51 40	1 5 5		1 I 1	5 11 A
	71	271	1026	118	457	64	257

This made a total of 7,920 books, enough, if of the right kind, to supply all these schools well. The highest number per pupil in any one school was twenty, the lowest was one-fourth. In fifty-five schools all the books were suited to upper grades only and in many of these they were beyond the years represented in the school. They could yield no return on the investment they represented unless used by the community. In a few schools they were the cast off books of a former generation and treated of antiquated materials, the science and history

of forty years ago, and geography of the same period. In twenty-three of the schools the libraries were quite representative and contained books generally suitable for all grades, the relative proportion being shown in the table.

Classified, these 7,920 books consisted of 4,708 copies of fiction, 821 books on science, 1.023 on history and biography, 71 song books, 271 supplementary readers, and 1,025 reference books. The fiction was for the most part wholesome but beyond the age and experience of the pupils. Some objectionable fiction was found and the amount of fiction was out of all proportion to its value. The 821 copies of science books contained sample texts, geographies and geographical readers, and some good science material for upper and lower grades both. The 1.023 histories and biographies were quite good, though not always suited to the schools in which they were found. The seventy-one music books were song books of inferior grade and material, with one exception only. The 271 supplementary readers were suited to the first five grades. The 1,026 reference books included various kinds of encyclopedias, ranging from a one volume work to the International. Some were very old and almost worthless.

Dictionaries were not counted with reference books. The table shows that the number in any one school ranged from one to seven. Where the number exceeded two the additional ones were of academic or smaller sizes. Where there were two, one was nearly always a smaller size. The large ones were either International or Unabridged. The total number was 118. Two schools had none at all.

The magazine column shows that no magazines or newspapers were taken in any of these schools.

Most of the schools had one or more sets of maps, the total number of maps being 457. These were usually good and in good wall cases. Some of them were too old

to be good. The outcome of the European War may make even the most recent ones obsolete, so all were advised to postpone buying new ones for the present. Four schools had no maps of any kind.

Globes varied from the thirty-five cent size to one costing at least twenty dollars. Sixteen schools had none at all, two had two small ones each, and sixty had one each.

Good pictures were rare. Framed pictures numbered 257, an average of a little more than three for each school. These were almost all of inferior grade, poor pictures, shabby frames, dull, lifeless, and lacking in character. A few schools had the highly colored, cheaply framed chromos of a generation or more ago. Evidently no teacher had had the courage to take them down and there they were, mute reminders of the decorative instincts of primitive man, a pitiful attempt to make the unlovely beautiful. If some clubs want to bestow a real gift upon the rising generation they can do it by giving a good picture to schools of this kind, but let them first stipulate that the lifeless, characterless, gaudy and unsightly ones be first removed.

### Source of Water Supply.

Perhaps the most surprising situation revealed by the Survey was the fact that nine of these schools made no provision for supplying water to the school. In these nine the children or the teacher had to carry drinking water from a quarter to a half mile. One was supplied by water from a spring about an eighth of a mile away. In one school each child brought a bottle of water to supply his or her own need. This primitive way of providing drinking water has no place in the great State of Illinois. Four schools had cisterns, only one of which was provided with a filter. The other sixty-four schools

had wells, either curbed or driven. Two of the cisterns were cleaned before the opening of school in the fall, the other two were not. The water of one was not usable. Twenty-seven of the wells had been cleaned in the fall, thirty-seven had not been.

Three of the wells were not more than fifteen feet from an out-building, ten were about thirty feet from one, five were forty-five feet, ten were sixty feet, nine were eighty feet, and the rest were from eighty feet to

two hundred feet from an outbuilding.

Only two wells were near stables, one being only two rods distant, the other five rods. The distance of the wells from the school building varied from four feet to one hundred twenty, the average distance being thirtyfour feet.

### DRINKING FACILITIES.

All of the wells had pumps and most of the children had individual drinking cups, but the law was not observed in some of the schools, as there were six in which a common drinking cup was used. Fifteen schools kept a pail of water in the room. Ten had tanks and faucets. In the others the children went to the pump for a drink.

### COMMUNITY USE OF SCHOOLS.

Only four reported any use of the school as a social center and this to a very limited extent. So far as the visitor could ascertain the community use was only for such entertainments as were provided by the teacher and school. Some of the schools had had some sort of money making entertainment, but these were not community enterprises, except that the community helped by attending.

### CONDITIONS AFFECTING INSTRUCTION.

Monitorial work was unknown except in one school. Pupils handled their own wraps. Teachers passed books and working materials. Pupils "passed the water" in two schools.

Seventy pupils left the room during the visitor's stay. This did not seem to be an evil except in two schools where little control existed and pupils were noisy in leaving and returning and wanted to attract attention. The period of absence was not too long in any case observed by the visitor.

The room dictionary was not used as much as it should have been. Only ninety-six pupils consulted it in seventy-eight schools, while the visitor was present. In some places it was used by the teacher. Not infrequently its chief use was as a physical prop. In a few instances it resembled the traditional dust-covered Bible of some homes.

The routine of passing classes to and from seats and blackboard took very little time. It was reduced to a system in but very few cases, but as classes were small little time was wasted by this lack of system, but bad habits were being formed.

Pupils seldom rose to recite and rarely responded quickly. They did not rise uniformly on the same side of the seat. Their position while standing was quite apt to be lounging.

Some schools kept no record of tardiness. Some showed very little tardiness, others showed considerable. The pupil's verbal explanation was accepted as sufficient excuse.

Absence for the preceding month varied from none in two schools to 470 in one having an enrollment of sixty. These absences were rarely excused as school people understand this term.

Four teachers' records were very poorly kept, four had left their records at home, many were well kept, a few were excellent.

No teacher was initiating a new routine of any kind.

#### THE DAILY PROGRAM.

In most schools the daily program was not posted in a conspicuous place. It was rarely posted at all. It seemed, however, that a definite program, which had become familiar to all, was followed.

The number of daily recitations varied from fourteen to forty. The school having fourteen had only three grades, the one having forty had only twenty pupils.

TABLE OF CLASSES

1	school	had	40	classes	19	schools	had	26	classes
1	school	had	38	classes	2	schools	had	25	classes
2	schools	had	34	classes	7	schools	had	24	classes
7	schools	had	32	classes	4	schools	had	22	classes
3	schools	had	31	classes	2	schools.	had	20	classes
4	schools	had	30	classes	2	schools	had	19	classes
• 1	school	had	29	classes	1	school	had	18	classes
10	schools	had	28	classes	1	school	had	17	classes
8	schools	had	27	classes	1	school	had	14	classes

Usually those having fewer than twenty-four classes had only part of the grades represented, but those having more than twenty-eight classes did not have more than eight grades.

The program called for a daily recitation in each subject but often some of the recitations were crowded

out.

Alternation as outlined by the Illinois State Course of Study was followed to a limited extent, apparently only in the seventh and eighth grades. In five schools the number of classes was reduced by alternating subjects, such as physiology and language in two schools, civics and geography in one, and reading and grammar in two.

Usually programs were so arranged that pupils did not have two recitations consecutively, except in case of drawing and penmanship, thus giving a study period immediately preceding a recitation period. The study periods were not carefully supervised.

### INTERMISSIONS.

Recesses were uniformly fifteen minutes long. Noon hours varied from thirty minutes to an hour. The reasons assigned for the short noons were that in some cases the parents preferred having the children come home half an hour earlier and in other cases the time table of the local interurbans made it necessary for the teacher to leave earlier than four.

### OPENING EXERCISES.

In thirteen schools the opening exercises consisted of reading and telling stories and giving memory gems; in thirteen of singing; in twenty-eight of reading and singing; in one of nature study and agriculture; in four there was no pretense of any sort to opening exercises; and in nineteen the exercises were devotional, consisting of the Lord's Prayer, Scripture Lesson, and sacred songs.

### THE STATE COURSE OF STUDY.

One county used a county course, another combined the State course with a county course, in all the other counties the teachers professed to follow the State course in part, at least. There was little evidence that they were working it very hard, but this was not surprising when their text-books gave them little help and their libraries less.

In about twelve schools an effort was made to make the work practical. In another dozen an effort was made to base problems and language work on community activities and environment. In the rest the work was largely formal.

### SCHOOL GOVERNMENT.

As a rule the school room order was good. In a very few schools the order was very bad. Punishment was •

rare. The usual mode of control was through the personal influence of the teacher. Some used absolute authority. None used pupil government. The chief offenses against good order were whispering and moving about. In thirty-four schools there were no serious sources of disturbance and there were no occasions for teachers to correct pupils. In thirty schools there was considerable moving about which disturbed not a little. In about half of these these the teacher seemed not to notice the difficulty. In the other half lapses were treated individually. In all but five cases the disturbance seemed to be due to carelessness or accident rather than to willfulness, but in these five they seemed clearly attributable to malicious intent. In six schools whispering was the chief evil. In four cases teachers were blissfully unconscious of it: in two there was some effort to correct it. It was not accidental but the malicious feature was not so much in evidence as in the cases of moving about.

In one school the chief source of disturbance was the unrestrained blurting out of questions which the teacher did not know how to handle. In another it was incessant talking, not whispering, the teacher seeming entirely unconscious of the situation. Her ability to ignore the situation was sublime. If she knew that her school was not what it ought to be she did not betray it by tone or

look.

There was some troublesome laziness and quite a little listlessness. Punishments were undesirable only in one school. There were a few cases of sharp rebuke, a few of isolation, and a few of expressing disapproval in such a way as to make the pupils ashamed of themselves.

### CERTIFICATES OF AWARD.

Certificates of award for perfect attendance were used in many of the schools. The general opinion of the

teachers was that these certificates stimulated attendance and punctuality. A few schools used honor rolls for good attendance and good conduct. Others used gilt stars for good work. No rewards and privileges were used that led to unwholesome competition. They were all of such a character that all who made an honest effort could receive a reward.

#### THE TEACHER.

The list of adjectives, forty-two in number, applied to teachers by the questionnaire, was too comprehensive for the visitor to use with any degree of skill. An effort was made to use them wisely and the following table is the result:

8	teachers	were	lax	88	opposed	to	strict.
3	2.2	11	suppressing	2.2	7777	2.2	stimulating.
6	11	2.7	weak	9.3	2.2	2.2	firm.
8	2.2	11	harsh	11	9.7	2.2	
2	,,	"	antagonistic	11	7.7	27	
3	9.7	9.7	irritable	11	11	9.7	even-tempered.
2	91	2.7	unreasonable	3.2	11	11	reasonable.
2	**	2.2	intolerant	2.7	12	2.2	
2	19	12	undignified	11	11	22	dignified.
10	17	2.7		99	19	2.2	
	,,	11	nagging	7.7	2.7	2.7	encouraging.
2	,,	11	rude	2.9	,,	1,0	courteous.
12			blundering	2.7	27	22	tactiui.
1	teacher	was	diffident	22			enthusiastic.
2	teachers	were	slow to react		2.5	,	quick to react.
7	"	2.7	dependent	2.2	"	2.2	resourceful.
3	11	11	disorderly	2.2	12	2.7	systematic.
3	1.9	11	weak	17	7.7	2.2	vigorous.
2	2.2	11	nervous	2.2	12	2.2	poised.
ä	3.1	2.2	slovenly	2.2	11	9.9	neat.
ă	91	11	embarrassed	12	11	,,	being at ease.

Many did not possess these attributes or their opposites in a positive way. Many virtues were purely negative or passive. The marked characteristics have been indicated.

#### THE PUPILS.

On the part of pupils, the following characteristics were observed:

```
disobedient as opposed to obedient
 7 schools pupils were
 19
                             noisy
                                                       '' quiet
'' industrious
                      ,,
                                              . , ,
                             indolent
                                          ,,
 13
                      ,,
                                                ,,
                                                       " careful
 17
                             slovenly
                                                       '' respectful
'' well-bred
                             disrespectful"
  9
       ,,
                      . .
 15
                             ill-bred
1 school
                                                       " happy
              2.2
                      ,,
                                                , ,
                            unhappy
                                                       " loyal
              -33
                       7 3
  3 schools
                             disloyal
12
                             discourteous'
                                                , ,
                                                       " courteous to
                                                                 each other
  In 11 schools pupils were non-cooperative as opposed to cooperative.
```

The opposite virtues were not strongly in evidence in the other schools but in the main the attitude was

good.

In six schools eighteen pupils were engaged in other activities than their regular lessons. These did not seem to disturb the others.

### TONE OF THE SCHOOLROOM.

The general tone was unpleasant in four of the schools, indifferent in eighteen, and pleasant in fifty-six.

In six schools there was an apparent lack of sympathy between teacher and pupils. In many this relation was purely passive. One teacher was too formal, two admittedly hated their work, and three others were not in sympathy with their work.

### Instruction.

The greatest need of country schools today is trained teachers who can teach and not merely hear recitations. The most serious criticism on the schools visited was on the character of the teaching. Assignments were generally very poor. The preparation of the lesson was inadequate on the part of teachers and poor on the part of

pupils. The teacher's aim was reasonably clear in fiftynine schools, but not clear and definite in nineteen.

Nineteen teachers used a topical method of recitation - in at least one class, thirteen used a question and answer method in part, the rest used the text-book almost exclusively.

Very few teachers took any precautions to insure attention and did but little to revive lagging attention. Classes were so small in most cases that it was quite impossible to do anything less than to give passive attention. The few schools in which there was anything like vital, active attention stood out very clearly. In class, pupils were often interested, seldom energetic, rarely independent, frequently indifferent, often lazy, and usually dependent. Responses in class were usually in words or phrases but in twenty-seven schools recitations were quite good. In many cases responses were incoherent and in many schools many pupils failed to respond at all.

Pupils rarely asked questions in class. They went to the teacher for help during intermissions and demanded assistance during other class periods, thus robbing the recitation class of its share of the teacher's time, because help was not asked at the right time and place. Proper lesson assignments would have corrected this fault to a very great degree.

In all these schools only thirty-seven questions of fact and fourteen thought-provoking questions were asked by pupils during the visitor's stay.

In one school considerable time was lost because of indistinct speech of pupils, in three much time was lost because of failure to have devices used in illustration ready. In most schools so few devices were used that little time was lost on that account. In one school the calling and dismissing of classes consumed unnecessary time. Seven teachers repeated questions again and

again. Five teachers had the very bad habit of regu-

larly repeating pupils' answers.

Teachers' questions were seldom thought-provoking. They called for facts usually, suggested answers frequently, could be answered by "Yes" or "No" entirely too often, were sometimes irrelevant, and were often vague and indefinite.

The material in recitation was usually confined to the text, was generally within the comprehension of the pupils, was rarely related to children's lives and experiences, was in part adapted to the present and future needs of the children, and was worth while only in part.

The following table summarizes the character of class

work .

49

14 teachers did rambling work.
44 " more or less mechanical work.
47 " stimulated the initiative of the pupils to a limited extent.
56 " required a little independent thinking.
48 " attempted to develop pupils' resourcefulness to a very limited degree. 60 required some co-operation. 67 paid some attention to essentials. 56 required some organization of materials. 22 utilized children's experiences a very little. 55 cleared up some of the difficulties of pupils. talked too much and did too much of the reciting. 58

In forty-three schools no objective means were used to make the work concrete so as to attract and hold attention. In the other thirty-five, maps, globes, charts, and objects were used to a limited extent. One school had a sand table and one a doll house.

In fifty-eight schools the recitations were marked by regular intensity, which was never very intense, however, and in twenty the recitations were alternately bouyant and depressing, rarely manifesting any degree of enthusiasm. The causes of these alternating periods were various. In four cases they were attributed to the general disorder of the room which distracted the attention of the pupils. In four they were attributed to the

teacher's manifest lack of preparation. In one it was due to erratic teaching, and in the rest, to the general lack of enthusiasm and interest on the part of the teacher. In forty schools the teacher seemed to know how to take advantage of specific emotions of pupils, but these emotions were sparingly manifested.

In six schools some of the lessons observed were of a drill nature, in two there were examinations, in twelve there were review lessons, only eight teachers gave anything that could be called a problem lesson, and in none could the recitation be called a study lesson.

Usually the material of the recitation was new and had been assigned for preparation. The average period was very short. Little effort was made to discriminate between essentials and non-essentials. Study questions had been prepared by the teacher in a few instances but these had not been used as a help in preparing the lesson. They were used as a guide in the recitation. The results were meager.

Except in one school the assignments did not deserve to be called assignment lessons. They were made at the close of the recitation in less than half a minute, called no attention to difficulties, were clear and definite only as to number of pages and paragraphs, and betrayed entire lack of preparing for the assignment. They did not lead to an effective and aggressive attack and were altogether too formal. No individual assignments were made. Pupils' work was very general in consequence and lacked specific aim.

### USE OF ENGLISH.

Eighteen teachers used poor English, using double negatives, improper contractions, plural verbs and pronouns with singular antecedents and vice versa, and confusing past tenses and past participles of verbs.

### CORRECTION OF ERRORS.

Correction of essential errors by pupils was usually made, if at all, by requiring pupils to correct their own errors. Seventeen teachers merely called the attention of pupils to their mistakes without demanding anything of them. Twenty-three paid no attention to gramatical errors. Thirty-eight led pupils to see their errors and to correct them. Sufficient emphasis was not laid upon correct forms to eradicate incorrect ones. No record was kept of recurring errors which were likely to retard the progress of pupils.

### SPECIAL METHODS.

#### READING.

Reading recitations were rarely over ten minutes long, never more than fifteen, and in some cases only five. In primary reading the word method was commonly used. The word and sentence methods were combined in some instances. A few teachers used the phonic methods. Phonic analysis was not taught in more than a half-dozen schools. Three teachers confessed to using the time-honored alphabetic method.

The Baldwin readers were used in most of the counties, the Cyr came next, Barnes next, then followed in order of number, Brooks, Blodgett, Progressive, Harper,

and Heath.

Silent reading was unknown in the first two months of the first year. Articulation and pronunciation drills were unknown in intermediate and grammar grades. The dictionary was used to a limited extent, and then merely to get definitions which were nothing more than synonyms and often meant less to the pupils than the original words. Dramatics were used in one school.

Criticisms were directed to the mechanics of reading and seldom aided in securing expression or in thoughtgetting. The private reading of pupils was not directed and but few teachers aided their pupils in selecting library books.

Supplementary reading material was supplied in a few schools and a few were supplied from a neighboring city library. In one county supplementary reading was supplied from the office of the county superintendent.

### SPELLING.

The spelling period varied from three to ten minutes. The average number of words was ten. These were usually selected from spellers but sometimes from readers and other texts. The State course was followed better in the lower grades in spelling than anywhere else. Laws of habit formation were followed unconsciously. No stress was laid on diacritical marking, syllabication, and accentuation. Spelling was taught incidentally in only three or four cases. Column spelling was the rule and dictation and composition "exercises were unknown. Children were not required to use spelling words in sentences and were seldom required to correct mis-spelled words. Oral and written spelling vied with each other for supremacy in the upper grades, but oral predominated largely in the lower grades.

### WRITING.

The handwriting period was usually scheduled for fifteen minutes, but seldom received more than ten, and frequently was crowded out altogether. Various kinds of copy books were used. A few pupils received individual help, but no systematic teaching of good form, correct spacing, good alignment, and good proportions was undertaken, except in so far as copies in the copy books were followed.

#### ARITHMETIC.

The arithmetic period was usually ten minutes for all the grades below the seventh, and fifteen for the seventh and eighth. Only a few cases of aggressive drill work were observed. No time was spent upon new problems illustrating old principles, practically none upon preparing the way for or removing the difficulties of new work to come. In almost every school all the time was spent in testing the pupils upon the assignment. Absolutely no time was spent upon the preparation of original problems by the pupils. A few teachers made a genuine effort to develop rules but the rule was to work by the rule. Answers were seldom verified. There was not a single instance of checking answers except by referring to book answers.

Accuracy of statement was not usually required, neither was accuracy of solution always demanded. Problems were usually written and little oral work was given. The text book was used almost exclusively. Analysis was not expected. Emphasis was not placed on impor-

tant subjects.

Nine teachers used games in primary work. Solution of problems was generally placed on the board. Explanations were not often required.

## GEOGRAPHY.

The length of the geography period below the seventh grade was usually ten minutes. For seventh and eighth grades it was from ten to fifteen minutes. Emphasis was placed on place geography. Type forms were seldom studied. There was no verification of physiographic principles. Books were supplemented in a very few schools. There was no attempt to have the recitation proceed in the order of statement of aim and collection of data, re-statement of principles underlying

data, and inferences and verifications. The recitation was of the examination sort and the children answered in terms of the text-book. The latter was seldom used as an authoritative basis for confirming or refuting the validity of judgments reached otherwise. Geographical facts were taught in isolation. There was little conscious effort to select certain minimum essentials and to insist upon their mastery.

#### HISTORY.

History periods varied from ten to fifteen minutes. A very few teachers emphasized movements, some emphasized events. Others emphasized neither and permitted the recitation to be a lifeless attempt at repeating the topics of the book. Only one teacher made the work concrete, that is, made the pupils see and feel in terms of the historical characters themselves. Texts were supplemented in six schools. Source material was unknown to teachers as well as to pupils. Causal relationships did not trouble teachers sufficiently to suggest their possibility to the pupils. Teachers did not point out moral and ethical situations. If any particular interest was manifested, it was in men rather than in forces. History has not come into its own in country schools.

### LANGUAGE AND GRAMMAR.

The length of these recitations varied from ten to fifteen minutes. Grammatical form was neglected but received greater attention than facility and freedom of expression. In a few schools the recitation in language was based on topics relating to the children's environment. Usually it was based on a text.

The chief gramatical errors were the same as those of the teachers listed elsewhere. These mistakes were corrected occasionally but they were not sufficiently stressed to embarrass the pupil or class or to break up the habit.

Much daily written work was required but it was used more as a makeshift to keep children busy than as a means of improving their speech. Sentence work and compositions were sometimes read and corrected in class. Sometimes they were corrected by the teacher out of class and returned. Sometimes the best work was saved for exhibition purposes. Much of it found its way into the waste basket without being corrected at all. In a very few schools pupils were required to rewrite their corrected papers to try to make them perfect.

Four schools had no seventh and eighth grades and so had no formal grammar. All the others had formal grammar five times a week in ten or fifteen minute recitation periods. The text-books used were as follows:

```
In 27 schools Gowdy was used.

Steps in English was
               Robbins and Row
                                          22
               Metcalf
               The Mother Tongue "
               Buehler
               Reed and Kellogg
    3
         2.2
                                          12
    3
               Hyde
        1.2
               Webster and Cooley
    1 school Emerson and Bender
              Kimball
              Buehler and Hotchkiss was used.
```

Typical lessons illustrating phases of work or method not indicated in the regulation common branches were seen in three schools. One was a very fine music lesson, and two were fine lessons in physical education in which exercises with dumb-bells were given. One school was using the home credit plan.

#### THE TEACHING IN DIFFERENT SUBJECTS

			-						
Primary readin	g was	most	poorly	taught	in		school	8.	
Arithmetic			,,			19			
Reading	2.2	22,	, ,	, ,	2.3	15	2.2		
History	1.2	2.2	1.2	2.2	2.2	- 5	2.2		
Grammar	2.2	2.2	2.7	, ,	2.2	5	2.2		
Language	2.2	2.2	,,	2.2	9.2	15	2.2		
Spelling	2.2	2.2	2.2	2.2	2.2	14	2.2		
Nature Study	2.2	2.2	2.2	7.7	3.2	ĩ	school		
Civics	2.2	2.2	,,	,,	2.2	î	7 7	•	
Writing	2.2	2.2	1.9	2.2	1.2	i	9.9		
Physiology	2.2	2.2	9.9	2.3	2.2	2	school	e e	
Geography	2.2	2.2	, ,	. ,,	2.2	9	11		
Arithmetic	, ,	best		, ,	2.2	16	1 1		
	2.2	pest		7.1	,,		2.2		
Grammar	2.2	,,		, ,	,,	17	, ,		
Geography	,,	, ,		, ,	, ,	10	,,		
Reading						20			
History	, ,	, ,		, ,	2.2	8	* *		
Physiology	2.2	1.2		, ,	,,	2	2.2		
Civics	2.2	2.2		, ,	2 2	1	school		
Music	2.2	2.2		2.2	2.2	- 1	,		
Arithmetic	1.2	well		2.2	2.2	12	other	schools.	
Reading in	2.2	2.7		2.2	2.2	15	,,	11	
Grammar	9.9	2.2		2.7	2.2	12	2.2	1.7	
History	,,	2.7		2.2	,,	5	2.2	2.2	
	, ,	, ,		, ,	,,	9	,,	,,	
Geography	, ,	,,		, ,	, ,		, ,	, ,	
Physiology	,,			,,	,,	2	,,	,,	
Spelling	,,	2.2		,,	2.2	4	, ,	11	
Primary Work		, , ,				2			
Civics	,,	, ,		,,	, ,	1	, ,	school.	

## TRAINING OF TEACHERS.

## IN HIGH SCHOOLS.

Of the seventy-eight teachers, fifty-four were graduates of a four-year high school, five of a three-year high school, eight had had two years of high school work, and one had had one year. Ten had had no high school work whatever, having completed only the eighth grade before beginning to teach and having taken nothing beyond that since.

## IN NORMAL SCHOOLS.

Two teachers were Normal school graduates, one had had two years in a Normal school but one of these was academic, six had had one year, two a half year, one had had two terms of twelve weeks each, one had had one term of twelve weeks, two had had three summer terms of six weeks each, nine had had two summer terms of six weeks each, fourteen had had one term of six weeks, and one had attended a Normal summer school less than six weeks, leaving thirty-nine, exactly half, who had never been inside of a Normal school. It will further be observed that of the thirty-nine who had attended a Normal school, only eleven had attended as much as a half year. It follows that the Normal school has had little opportunity to affect the teachers and the work of the rural school. The work done by those who had attended a Normal school less than a year was largely academic, getting ready for examinations, and not professional,

not the work that trains for teaching.

The problem of the Normal school seems to the writer to be how to get these teachers into the Normal school. Special courses for rural teachers are being offered in some of the Illinois Normal schools and some students are taking advantage of these courses, but it is the old story. As soon as a teacher shows herself capable in a country district a neighboring village or town offers her special inducements to come to town and usually she accepts. Many writers on the subject believe that if the conditions in the country can be made more attractive. teachers will remain there. Fifteen years of careful observation on the part of the writer does not justify this belief. The call of the city continues to appeal to the teacher and only now and then do we find one who willingly remains in the country, no matter what the salary or the advantages. The writer has known teachers to give up \$65.00 a month in the country to take \$45.00 a month in town.

### IN COLLEGES.

One of these teachers had had a four-year College course, one had had two years in College, one had had one year, and one had had three months. None of the college people had had any Normal training.

#### EXPERIENCE.

The experience of the seventy-eight teachers varied from their first year to their twenty-eighth.

18	were	teaching	their	first year.	
11	>>	"	2.5	second "	
12	2.2	1.9	2.7	third "	
13	2.2	9.7	11	fourth "	
9	1.9	12	7.7	fifth "	
6	11	2.7	9.9	sixth "	
3	11	11	17	seventh "	
1	WHE	2.2	her	eighth ''	
2	were	9.9	their	tenth "	
. 8	11	11	11	twelfth "	
2	9.9	2.2	22	seventeenth year.	
1	Willia	11	her	eighteenth "	
1	2.2	"	11	twentieth "	
1	2.2	17	2.2	twenty-eighth year.	

This made the average teaching age of this group of teachers four and nine-thirteenths years.

While only eighteen were teaching their first year, fifty-three were teaching their first year in the school they were in, making 68 per cent of the teachers beginners in the schools they were teaching. Of the rest, thirteen were teaching their second year in the school they were in, six their third year, two their fourth, one her fifth, two their sixth, and one her eleventh.

These figures show frequent changes of teachers and account in part for inefficient work.

These figures show frequent changes of teachers and account in part for inefficient work.

TOTAL NUMBER OF DIFFERENT SCHOOLS TAUGHT.

The total number of different schools taught in varied from one for all beginners to eight for one who had taught seventeen years.

22	were	either tes	chi	ng the	ir first	school or	had	taught	in	but	one.
		teaching	in	their							
18	"	11	2.2	12	third	"					
7	2.7	17	17	17	fourth	"					
4	11	27	9.9	**	fifth	9.9					
1	was	12	22	her	sixth	11					
1	17	22	7.7	17	eighth						

### INTEREST IN RURAL LIFE.

These teachers were all given an opportunity to say whether or not they were especially interested in rural life and rural school problems. The claims on this point were not great but they were greater than appearances warranted.

### PROFESSIONAL INTEREST.

Professional interest as shown by teachers' answers to questions asked was up to the standard. Seventy-four attended institutes and other teachers' meetings regularly; four would not say. Seventy laid some claim to outside reading, mostly the Teachers' Reading Circle books; the others said they were too busy to read anything but the papers.

## ADDITIONAL FACTS.

Seventeen of the schools visited were Standard schools; one was a Superior school.

Seven of the teachers visited were men; seventy-one were women.

The ninth grade was attempted in two of the schools but the results were poor. Lack of time, preparation, equipment, numbers, and enthusiasm accounted for this.

### CONCLUSIONS.

Teachers generally are poorly equipped for work in the country. They do not understand its needs nor appreciate its opportunities. Teaching is mechanical and poor.

Frequent changes in teachers are deplorable.

Teachers need a sense of their responsibility and of the dignity of their work.

Young people must be trained to see needs of schools

and how to teach.

Professional zeal is a surface feature. It has not reached the heart and life.

There is an over-abundance of worthless charts, not necessarily worthless in themselves, but worthless because no one uses them.

Libraries are poor, inadequate, and not suited to the schools.

Communities are not awake to their needs.

The question of suitable boarding places for teachers is an important and serious one.

The Normal schools have had little opportunity to

affect the teaching in the country school.

The country school needs a new baptism. If a John the Baptist has arisen, his preaching has not materially affected a large proportion of our country schools. He may be preparing the way, but the valleys have not been filled, the hills and mountains have not been brought low, and the rough places have not been made smooth.

### RURAL SCHOOLS.

Edgar Packard, Illinois State Normal University.

My report consists of fifty-three rather elaborate sets of notes covering the fifty-three schools I visited on as many different days. It also includes these meager gleanings from the notes:

The fifty-three schools were located in eleven different counties: viz., McLean, Logan, Macon, Livingston, La Salle, Iroquois, Grundy, Bureau, Peoria, Henry and

Rock Island.

In getting one's geographical knowledge there is some advantage in facing the north. The county of Grundy is taking this idea into consideration in arranging the new buildings and the new seats in the old buildings. The reports show the following: facing north, sixteen schools; south, fifteen schools; west, thirteen schools; and east, nine schools.

## OUT BUILDINGS.

Every school visited was provided with out-buildings. One school had but one building for both sexes. One had a building for the girls and an old shed for the boys. One had a double out-building with a single board partition between the two parts, the two doors were but a few inches apart. Another school had two separate out buildings, but they were only eighteen inches apart. The boys' out-building in one school had the weather boarding removed on the side toward the girls' building. Only two schools had urinals for the boys, and only four schools had the out-buildings properly screened. Many of the buildings had the walls covered with obscene pictures usually the worst in the girls' buildings. One of the buildings belonging to the girls had the worst inscription I have ever seen. They had been placed there

by those who were waiting for the interurban cars. Most of these buildings are never scrubbed, and in the larger schools the boys out-building is generally filthy. The vaults in most every case are open to the light where swarms of flies are hatched. These flies swarm into the school room at the dinner hour particularly. One school had screens to keep the flies out. Several schools suffered from bad air and heat, because the doors and windows were closed to keep the flies out. In one school they were poisoning flies.

## SCHOOL YARDS.

The average size of school yards visited was less than one acre. Of the thirty-eight yards measured the average was three-fourths of an acre, the largest was two and one-half acres, and the smallest was one-fourth of an acre. In most places the roads are too wide and the school yards too small. (Counting eight miles of road to the district every foot cut off of the side of the road if it could be brought to the school yard would make about one acre. If such a change could be made the road would not miss it while the school would greatly appreciate it.)

## BUILDING.

Of the fifty-three buildings visited, forty-seven were frame buildings and six were brick. Of the brick buildings two were new and four were very old. Only two of the frame buildings were new and while forty-five were from ten to seventy-five years old. Seven were provided with basements, three of the basements were very dirty, one was fairly clean, one was as clean as the rest of the building, and two had room only for the furnace and fuel. Of the basement furnaces three took all of the cold air from the floor of the school room, two took the cold air from the outside and two from both places.

#### WATER SUPPLY.

A good many schools run without any drinking water. One school has a cistern. In another school a pail of water was brought from a farm house and set down in the yard. The children gathered around it, and dipping a common cup to the very bottom of the pail each time, drank what they could and then very economically poured the remainder back into the pail. Still another school had a well but the children said they pumped a part of a snake out of the well and had quit drinking the water.

#### LIBRARIES.

The schools of La Salle County are well supplied with good library books. The five schools visited had libraries as follows: 113 books, 184 books, 247 books, 272 books, and 333 books. In addition to these they have a county system of supplementary readers by which a teacher may get all of these readers she can use.

These readers as a rule contain the best that has been written. The library books have been carefully chosen. The only objection is that instead of some of the histories there might have been copies of Longfellow, Whittier, and Lowell. The county superintendent prescribes courses in reading and certificates are issued to those doing the required work. As many as fifty thousand school children and ten thousand other people have finished these courses in a single year.

## MUSICAL INSTRUMENTS.

Many schools have organs but very few of these organs are in condition to be played. In most cases the mice have done the damage. In one school the teacher had rented a piano and expected to find some way to pay the rent. Another school has a good piano of its own.

#### SLATES.

The old slate has many devotees. In one school primitive methods were used in erasing the work from them.

## HEATING AND VENTILATING.

Thirteen of the schools still have stoves with no jacket or ventilating system attached while forty schools have some form of modern heating and ventilating. Some of these forty have only a jacket for the stove and have to depend on the doors and windows for ventilation. Several basement heaters take all of the "fresh" air from the schoolroom floor.

#### THE COUNTY SUPERINTENDENTS.

It was a very unfavorable time to visit the county superintendents. An exceedingly warm political campaign was in progress and many of the superintendents had active opposition. They were dividing the time among politics, office work, and supervision. The school supported by public taxation is about the only business in the world that could run at all with such a dearth of supervision. The visits are necessarily very short and very far apart. The record of one superintendent was ten schools in one day and forty-nine in one week. I remember in one instance dividing the weight of the superintendent by the number of country schools and found there were twelve ounces of supervision for each school. Now twelve ounces is a very small amount of supervision where there is such a great complexity to supervise. Usually the county superintendents have no hope of covering the entire field. Their time is employed in helping those that want their help and where there is opposition and stubbornness they, "Flow gently. sweet Afton." In such districts their presence is more in the nature of a passover than a visitation. Like the angel of old, they see the blood sprinkled on the door post, the blood of some predecessor or possibly their own—and they pass over. They can't do everything and they try to do what meets the least resistance and promises the best returns. They emphasize different lines of work in their supervision, one superintendent has great faith in devices. His teachers are well supplied with material and helps, and devices for drill work and so on.

The teacher is allowed five dollars a year for this work, and in one school there was a special desk in which to keep this material. Another superintendent emphasizes the improving of school property, making careful inventories and encouraging his people to make greater efforts. Still another superintendent places the emphasis on school libraries and supplementary readers, and reading courses. Readers are loaned to the schools if the teachers will come after them and be responsible for He also has a system of certificates that has already been mentioned. Still another superintendent has a system of reports by which he keeps in touch with every school and of every child. These reports have been continued for several years and contain an educational biography of every child in the County. Then one superintendent makes a specialty of attendance, another of examinations, and so on.

### TEACHERS.

One teacher that I visited is worshipped by her children. She has taught for sixteen years and has charge of the upper grades of a village school. She is faultless in dress, in manners, and in speech. She comes into the village on the interurban a few minutes before school begins and returns as soon as school is out. She does not make herself very familiar with the children, but remains for them more of an ideal than a real. She is not normal trained and some things she does raise the clouds

of criticism in the observer, but before he can crystallize or condense them into form they are melted into vapor by the genial atmosphere of her presence.

I have used the word "worship" here and I have used it advisedly. As one watches the largest boy, the clumsiest boy, the dullest boy, all of them as they march in and out, as they study, as they stand and recite you say to yourself, "This is more than mere respect, this is worship."

SAMPLES OF ENGLISH USED BY THE TEACHERS IN LANGUAGE AND GRAMMAR RECITATIONS.

```
"Couldn't nobody show you the big dipper?"
"One seen the mud and the other the stars."
"Review that over."
```

"The way they done their work."
"And he run home." "The people they know what there gettin."
"Large pieces are broke off." "How many times have you wrote that?"
"We don't have nothing like that." "I knowed it wuz."
"Things was run in that way." "That would be swell goods."

Many times the idea came to me that the teacher is the mother and the state is the father. When I found



No 1

[&]quot;Wonder why we don't get more letters,"

[&]quot;Wonder why we don't get move when we will seen an envelope."
"Never sent another to no one."
"You was out, wasn't you?"
"It don't contain a predicate."
"Pural, Antercedent, loquated."
"When we see a person holding their book."

[&]quot;Did you get your story wrote?"
"Fill in these here blanks."

[&]quot;Have you ever saw a lake?"

the teacher in some old broken building I thought of the teacher as the wife of an invalid or of a profligate.

One of these old buildings is here shown (Picture No. 1). It brings to mind Whittier's lines; "Still sits the school-house by the road, A ragged beggar sunning"—with a great deal of emphasis on the "Still." Picture No. 2 shows the inside of the same building. The old double desks have 1866 stamped upon them. Now the



No. 3 No. 4

district abounds with wealth. Picture No. 3 shows a home from which one pupil of this school comes. A few miles away is the interurban station shown in No. 4. This beautiful building in which they will never remain but a few moments, show what they demand architecturally from the public utilities. This set



No. 6 No. 5

of pictures could be duplicated in many districts that I visited. Picture No. 5 shows how their treatment of the dead children differs from their treatment of the living children. Picture 6 shows us the buildings in which they are for one hour on Sunday; in the school house the children spend six hours five days in the week.

### THE SCHOOLROOM ORDER.

The conduct of school children is as a rule good. Of the fifty-three schools visited there was only one in which there was no semblance of control. In this school the children talked aloud, walked about at will and sat

with whom they wished.

The teacher was not conscious of disorder and only once during the entire day did she say anything in a corrective way. One boy was turned around talking to the boy back of him. She told them they must sit together if they wished to talk. In another school they were holding examinations and the children were conversing with one another and consulting their books freely in this work. They were not noisy and were not playing. Their efforts resulted in a joint rather than in an individual product. In yet another school the disorder would become louder and louder until the teacher would notice it and hiss. At this hiss they settled in a moment but only to get noisy again and have the hiss repeated. In a very large school the teacher responded to every disorder by slapping the children with her book or by making them stand or sit on the floor. She looked upon every disorder as a crime that must be punished, rather than as a guide board pointing to some defect in the system. One teacher made nearly all of the disorder in her school by talking so loud and so much.

Of the fifty-three school teachers only one had the larger view of what a district school should be. This teacher was endeavoring to make the school minister to

the educational betterment of everybody in the district. An abundance of good nature and tact was shown. They had had over two hundred people present at one time to their regular evening gatherings. The special training of this teacher consisted of only two summer terms in a state normal school.

A graduate of the full course in a normal school had organized a mother's club, but the only reason given for having this organization was to get better things for the school. There was no vision of doing something for anyone but the children. There was full faith that the system with some improvements would be able in seven or eight years to give the children enough education to last them seventy or eighty years. One might as well expect to put enough steam in the boiler of a locomotive to take the train to the distant terminal. The one other normal graduate visited did not have any clear view of community work.

## Public Meetings.

In every district visited, I tried to meet the people—all of them if I could get them to an afternoon or evening meeting, or to meet at least a few of them in their homes. In all I held twenty-three public meetings.

At one school we announced an evening meeting. Not one of the eight land owners in the district had a child in school although there were twenty-eight children enrolled. When I went to the meeting I found the room already crowded and four of the men were drunk, one was stretched out on the floor. As I started to talk to them, I told them to ask any questions they might have and to ask them at any time. At first the man on the floor annotated my remarks which greatly delighted the young fellows gathered around him. At last he called out "Stranger, I want to ask a question, Why don't we have free schools?" I replied that we did have free

schools, and that we had them in every state in the union. I started in to tell what a blessing this waswhen he interrupted again by saying, I had not answered his question, and he repeated it. I replied that I had answered his question and went on to explain that they were free to the children that attended although they are not free to the state and its taxpavers. The third time he interrupted me with the same question. I told him that if I had not answered it I would have to give it up. The question was like asking why we did not have a moon when we had a fine one shining. His response "And let her shine" raised a roar of laughter. As I was making such little headway I took from my pocket a picture of "Child Handel" and fastening it to the wall began explaining it in terms of their own struggles. I had used pictures elsewhere as a last resort and they had not failed me and this one did not fail me. The man on the floor crawled to the front of the room and climbed up on a bench to see and hear. Another man almost too drunk to hold up his head came up after the meeting to see the picture and ask questions about it. As I was walking along, on the way to a farmhouse that night the man that was lying on the floor overtook me. He was driving a wild colt to an open buggy and had five small children in with him. When he saw me he said he wanted to talk to me. He opened the conversation by asking me if he had gotten in bad with me. I assured him everything was all right whereupon he invited me to take dinner with him the next day that he might tell me all about their district which he designated as the "bad lands."

I told him that my schedule prevented my accepting and he continued. He lived on a ranch owned by a very prominent man, and this man was to be there to dinner the next day and he wanted us to meet. He said the man was a big hearted soul and he had a big heart for all the

children. He had offered to pay one-half of the cost of a good school if the rest of the taxpayers would pay the other half but they had refused. Here he grew more in earnest and added: "When I asked you why we don't have a free school I meant what I said. We don't have a free school here. My boys are bright to learn at home but they can't learn nothing at this here school." And here I might submit some evidences I had on the extent of this teachers' knowledge. Two examination questions she gave that day to the seventh grade history class were, "In what year did Columbus discover the United States?" and "In what year did Balboa discover the United States?" I remained all night with a wealthy landowner and director of the schools. His story was that the people with children would not furnish clothing that the children might go to school in bad weather. He said that I had come on a fine day and found them all in school but if I had come on a cold day there probable would have been nobody there. I had noted that day that though it was in November vet several of the children were barefooted, and very ragged. He said, if the parents would dress their children and send them regularly to school he would be the first to vote taxes to put in a good school, but the people spent their money for whiskey and the children went barefooted all winter.

The school had to close down in bad weather for the lack of pupils. About a month after this the teacher wrote me that school had shut down. To me it looked as if the board hired some untrained, inexperienced teacher from choice rather than from necessity. The building was old, and there was not a library book, a wall picture or a help of any kind. Such a school gave the children almost nothing for attending and they remained at home. The board then dismissed the teacher and in that way eliminated the expense and trouble of a school. Another drunk man during my attempted address asked

how many months school had to be maintained. He, too, probably implied more in his question than I understood.

I went to one school and on a rainy Wednesday morning. The interurban car passed by the school and a young lady got off the car when I did. I asked her if she was the teacher. I shall never forget her reply. Turning toward me with a look and a voice that were both like a flash she said, "You bet I am." As I understood this language we were acquainted at once. I asked her about getting the parents in for a meeting. She said that the parents would bring their children to school and I could ask them. They consented to come out at four o'clock although two members of the board were on the jury and had to spend the day in town. We had about a dozen adults to the meeting and the children remained. At first I talked to them in a general way, and then told them that it was almost time for my car and as I was not running for office, had nothing to sell and never expected to see any of them again I would talk to them of how they were mistreating their children although they thought more of these children than they did of themselves. Then I called attention to the big double desks, the uncurtained windows in front of the children, the walls painted black and the horrible display of obscenity on the walls of the out-buildings. Then I added that when they had made these improvements I would return and we would have a celebration. This was in October and on the first of the following March this you-bet-I-am teacher wrote me that the improvements were all made and she was instructed to ask me to set the date of the celebration.

I was there for the whole day and evening on March 16th. The people came out and other improvements were planned.

One school had thirty six square inches missing from

the front door and other things likewise. At noon I went to a magnificant farm house for a lunch. The man had just brought in a fine load of corn and was in excellent humor. He invited me to eat with him. I asked if I could get the parents out to an afternoon school meeting. He laughed heartily but shook his head in regard to a school meeting that interfered with corn husking. I asked if he visited his hogs. Again he laughed and added that he had to visit them or they would die. I told him that would be a calamity it is true but it would also be a calamity if all of our children went wrong. And I thought if we could visit our hogs every day we ought to visit our children once in a while. His wife cried out "Give it to him" whereupon we all laughed. "I don't see for the life of me," continued the gentleman, "what you would do at a school meeting," Emboldened by the remark of his wife I replied about as follows: "When I got off the train down at your village this morning a half dozen other men alighted at the same time. They went to the best hotel, engaged the best rooms, bought the best cigars which they sat down and smoked, and then went out to tell you men what kind of automobiles to buy, what kind of farm machinery to buy, what kind of building paint to buy, and so on. They are doing their work well for I have observed that you are up-to-date on all of these things. But I have come out here in a quiet, modest manner to tell you not how to get more of the wealth of Illinois in automobiles, machinery or paint; but how to get more of it into the minds, the hearts, and the characters of the children." We had our meeting but he did not attend. I asked a gentleman with me to compare the value of one automobile present with the value of the entire school plant, land and all. He smiled and said that I could add two or three years of the teacher's salary to the school plant and the automobile would still be worth the more.

#### Pupils.

One boy had enough individuality to have delighted the heart of Rousseau even when he was soaring to etherial heights on the wings of his rhetoric. was about fifteen years old, tall, and named Tom. As the teacher was perfectly capable of quelling any disturbance she gave the children great liberty. They talked to her at any time on any subject just as freely as if they had been in an informal gathering. Here is his recitation in response to the teachers' command to tell about Jefferson's War Policy. He arose to his full height and in loud tones began, "Well now then, Napoleon. Yes, thats' his name—Well now then, Napoleon. Well now-now (Teacher reading-"'He forbade any of the ships")—Beance that Nopolean didn't have no navy, Lord Nelson destroyed it in a big sea fight., (Another student began at this point.,) I can tell it! I can tell it! They made such a poor treaty,, well sir, this important act why it forbid any war with England." In closing the recitation the teacher had them close their books for a review.

Teacher: "Who was the first president?" all the children, reciting like a crash of artillery—"Washington."

Teacher: "Who was the second president?" Half the children: "Jefferson." The other half of the children: "Adams." After much scrapping the order was settled.

Teacher: "Who was the fourth president?" There was a silence for several seconds when Tom raising his head and hand as if he had received an inspiration, announced, "We haint had him yit!" "No," said the teacher, "but be watching so you'll know." The day

was very warm, the room was small and crowded, the windows and door were closed to exclude the swarms of flies. When the children came to class the teacher asked sympathetically if they had their lesson. "Yes, I've got it," said Tom, "but it isn't the lesson, it's an awful headache." A small boy sat with him in the big double seat. The little fellow went to sleep. This is the way Tom announced it, "Teacher, this here feller wont study his lesson—says he's sick." The teacher replied with a mere, "Probably he is."

In one school one of the boys kicked at me. It was a large school with a fine building and excellent equipment. The teacher was a young girl beautiful in features and apparently still more beautiful in character. Conditions were conducive for an ideal school and all of the children, except six or rather three pairs, responded with the best they could do. The teacher had but one slogan and that was, "Remember that I trust you." Those called out to recite sat in the front corner of the room and the teacher faced them. She never turned around once during the entire recitation.

When the recitation settled down these three pairs—two boys, two girls, and two boys—visited until the recitation ended.

They were not very noisy and were ready to adjust themselves and begin to study as soon as the recitation closed. I walked up along the aisle and was watching one of the children solve problems when I heard a noise back of me. I turned by instinct acquired while teaching for over a quarter of a century. I caught a lad with his foot in mid air trying to recover himself after kicking. I went way back and sat down until I learned his name. Then I got permission of the teacher to speak to him in the hallway. When he came out I stretched up to my full height and looking down upon him, asked if he had not kicked at me.

"Why, I kinder kicked out into the aisle." I continued by asking him if he had been brought up to treat home visitors in that manner. He assured me that he had not. I then asked him if he thought a visitor in school should be accorded such treatment, and he replied that a visitor shouldn't be so treated. I concluded by asking him if he felt proud of this act or whether he felt sorry and ashamed. He replied that he didn't feel very proud of it. He then promised me that he would tell his teacher about it at noon and tell her how he felt about it. I was away at noon but at the last recess the teacher told me he had not said anything to her. I went out on the school ground and asked him about his promise and he replied that there were so many girls around the teacher he had postponed the matter, but would attend to it before school was out. I told him the teacher was alone and he could attend to it right now. He turned and said he would attend to it at a later time. I told him if he did not attend to it at once I would go with it to his parents. He went. I followed and he was telling her about it. I then talked to him in her presence where-upon she invited me to give the talk to the entire school as they all needed it. I tried to explain that only a few of the children needed anything in this line but she rang the bell and brought them in. I spoke to them about as follows: I have tried here today to be as orderly in my conduct and as respectful to your teacher as I could be. There are several reasons why I have acted in this way. One of these reasons I shall tell you. I know that your teacher has more power at her command than the mightiest king in the world. Were I to become disorderly and refuse to leave when she had ordered me out she could call in the school board to remove me. If my friends would come to my help and we would be too much for the school board they could call on the sheriff and he could deputize every man in the

county. If they were not adequate they could call on the Governor of Illinois who would send the militia If they could not handle the situation they could call on the President of the United States who could call out every able-bodied man in the country, from eighteen to forty-five years of age, and they constitute the mightiest single force in this world. Knowing this great fact I have tried to treat your teacher and this school as respectfully as I could. But some children don't seem to realize how much power the teacher has at her command. If you will permit me I shall make a suggestion to six pupils in this room. Petition your teacher to change your seats." Turning to one of the boys I asked him what he thought of the suggestion. "I don't want to change," was his brief comment. His partner said that he didn't either.

I turned to the girls thinking they would be more responsive. The first one only giggled. The second one responded as promptly and as forcefully as a powder magazine. "I think if I get my lessons it isn't anybody's business what I do!" I replied that conduct came first, before lesson or anything else; and promising to turn the matter over to her mother and to the county superintendent, I sat down. The mother confessed in tears that she could do nothing with the girl. The county superintendent talked with them but they refused to change. He promised the teacher that he would return and help her out with the matter. I then tried to tell the teacher that the man in the cage with wild beasts always kept his eyes on them for he knows if he doesn't they will pick his bones some day. And if she didn't place her classes where she could keep her eves on her school while hearing the recitations those six pupils would be picking her pedagogical bones before spring.

#### CHILDREN ACTIVITIES.

In one school they are much interested in the European War. If they read of some battle they go out in the yard and dramatize it. One day one "soldier" was "killed." They made a grave and before they piled the leaves in on him the "priest" responded as follows: "God have mercy on this poor man. He came into the world without father or mother, and is going out of it with a cannon ball in his heart."

In another the children have dragged in timbers and tin, and have put up a very creditable structure.

#### STORIES.

I inquired for local stories, but found only a few. Here is one: An old man about ninety years of age was hoeing in the garden when he received a stroke of some sort and fell. A passing neighbor picked him up. The old man became conscious and inquired where he was being taken. The neighbor replied that he was taking him to the house. The old man objected and in pleading tones said: "Let me finish the row first." Another stroke came and he was dead.

An old man was a drunkard and without a friend. He had a garden and exchanged the products of this garden for whiskey. But on a hot day when he was out hoeing he fell dead. He was not discovered for several days. When the body was found it was so badly decomposed that the coroner ordered it buried at once. One neighbor went to town for a coffin and the others dug the grave. It was almost midnight when the body was at last lowered into the grave. The men looked at each other for a moment and then one of them asked the others if any of them could pray. They could not. He then suggested that they all stand with their hats off. This was the only religious exercise they could perform.

Across the road from one school the first wooden plow in that county did its first work. This plow was taken to the World's Fair in Chicago where it stood by the side of John Deere's latest production. It was then taken to Springfield where it remained many years. It was later removed to an old settlers' building that was constructed on the county fair grounds.

All of the lines in one district ran with the world either east and west, or north and south, except that across one quarter section there was a diagonal line. I I was told that two men occupied that farm in common for many years. At last they wished to divide it. With an ox team and a plow they made a furrow that angled off down across the land. This furrow became the permanent boundary and there are point rows on both sides of it.

# REPORT OF RURAL SCHOOL VISITATION ILLINOIS SCHOOL SURVEY

## Joseph H. Hill

The following report is frankly impressionistic rather than statistical though it may prove valuable to place some summaries of facts in statistical form. Forty-two schools were visited in eight different counties, five in Richland County, eight in Champaign, seven in Vermilion, three in McHenry, four in Boone, five in Coles, two in Henry and eight in Ford. On account of the brevity of the visit and the incompleteness of the data from two of the above list, one in McHenry and one in Ford County, reports are not appended. The schools may fairly be taken to represent average conditions. By design, no consistent principle of selection was followed. Usually the effort was to see some of the better and some of the poorer schools in each county, but varying elements determined the selection, including especially good or especially poor physical conditions, the experience or lack of experience and training of the teacher, the length of the teacher's service in the particular school visited, probably good, average or poor teaching quality, strength or weakness in discipline, the size of the school and the convenience of access. I met with uniformly courteous and helpful cooperation on the part of the county superintendents in the counties named as well as all of the teachers visited. Visits were made to fourteen of the forty-two schools in company with the county superintendent, twenty-eight were visited alone. Most of the schools were selected in conference with the county superintendents and at their suggestion, though in most of the schools visited alone the time was selected at my convenience, and I have reason to believe that in a very

small number of eases, probably not six in all, did the teachers have any previous knowledge whatever of my coming or of the time and purpose of my visit. All of the county superintendents seemed to me especially frank in their coöperation and in their efforts and suggestions to enable me to see actual average conditions.

#### ENROLLMENT AND ATTENDANCE.

The forty schools included in this report enrolled eight hundred and fifty-eight pupils. The largest number in any one school was forty-seven, the smallest seven, in two schools, in one of which the actual number in attendance on the day of the visit was five. Seven schools had twelve pupils or less enrolled, twelve schools had from thirteen to nineteen, fourteen from twenty to twenty-nine, five from thirty to thirty-nine two schools forty or above. In thirty-six schools from which the data were obtained the number of children from six to sixteen not in school is twenty-nine. These twenty-nine were in fourteen districts. The largest number recorded in any one district is four. Twenty-two districts report none. The source of information depended upon was the investigation or impression of the teacher and this may be an understatement of the real condition. Three of the districts not reporting are among the more densely populated ones on the outskirts of a town or where the teacher could not have personal knowledge of all the families.

The reports as to tardiness and absence, taken in each case for the school month immediately preceding the visit, indicate a fairly healthful condition particularly as to punctuality, though for purposes of comparison the figures taken for each particular school have little value. Some of them represent attendance during the good weather of November, others the unsettled weather of January and February. A glance at the

teacher's register indicates in almost all cases that a few pupils in each school, often from a single family, are responsible for the greater percentage of irregularity in attendance. With the great majority of pupils the ideal of regularity seems to be well established. In one county an epidemic of mumps greatly affected the figures, one school with nineteen enrolled reporting one hundred and sixty days absent, another reporting nineteen absences that month and two the month preceding. The figures as to tardiness show that in many schools that is not an especially serious problem. The largest number reported for the month for which the record was taken was twenty-four in a school having thirty-seven enrolled. Four schools reported no tardiness for the entire year. and twenty-five out of the forty schools had fewer than ten cases in the monthly report.

Here, as in the matter of attendance, delinquency is usually confined to a few pupils. One teacher reported five cases of tardiness for the month, all by one pupil. another, four, all in one family, the family that lived nearest the school house. That community sentiment has much to do with the matter or that something is effected by the ideals established among teachers is indicated by the fact that the high percentage of tardiness is almost entirely confined to two counties. I noted in two schools the enrollment of pupils in competitive divisions in a contest for a minimum record of tardiness. This, or other special means for reducing tardiness, may be used in other schools, but several teachers with whom the matter was discussed said that so little difficulty was now experienced that no special means were used. found rarely the record kept in country schools that indicates the distinction between absence or tardiness excused or unexcused.

### DISTRIBUTION OF CHILDREN AMONG GRADES.

Of the forty schools six have all eight grades represented, fourteen have seven, thirteen have six, two, four, and three, three. Three are attempting some ninth grade work but in none of these are all of the other grades represented. Of five hundred and sixty-six pupils in thirty schools, where data as to the distribution by grades are available, the distribution of pupils among the several grades is fairly constant, showing ninety-two in the first grade, seventy-eight in the second, eightyeight in the third, sixty-nine in the fourth, fifty-seven in the fifth, seventy-three in the sixth, seventy in the seventh, thirty-nine in the eighth. In only twelve of the thirty schools is the eighth grade represented. The smaller number of pupils in the eighth grade is very probably due to the alternation plan suggested by the Illinois course of study. One hundred and eighty-six different grades or classes represented in these thirty schools show enrollment as follows: forty-two grades with one pupil each, forty-one with two, thirty-seven with three, thirtyone with four, nineteen with five, eight with six, four with seven, two with eight, two with ten. The ten pupil classes were, one of them, a first grade class in a school of forty-one pupils, the other, a seventh grade class in a school with this peculiar distribution: three grades represented, with four pupils in the first grade, five in the fourth and ten in the seventh. Some extremely suggestive figures might be shown as to the per capita cost of instruction per pupil and per grade in such a distribution and the expensive wastefulness of our present one room, one teacher system under average and even under the best conditions.

## THE DAILY PROGRAM.

The daily program was posted, usually in a conspicuous place, in a little less than half of the schools vis-

ited. In all cases there was evidence of a definite daily program and in general it seemed to be followed with fidelity so far as the order of exercises was concerned and in most cases with not a great deal of variation as to time. I have a record of six instances where teachers overran the time of recitation so as to necessitate the omission of one or more classes, and a greater number, probably ten or twelve, mostly young teachers, who, though beginning recitations on schedule time, did not occupy the full time of recitation and spent the intervals in quietly waiting or in giving attention to the work of individual pupils. The most extreme case of this kind was in a small school where an actual note of time was made and in a period of ninety minutes just fifty was spent in class exercises, the other forty by the teacher at her desk occasionally answering a question of an individual pupil but otherwise apparently not occupied. Two facts should be taken into consideration in this case; one entire grade, consisting of one pupil, was absent. and the teacher, a beginner, was evidently under some embarrassment because of the presence of a visitor. In another school, an eighth grade history lesson, (by question and answer) scheduled for fifteen minutes, occupied exactly four. This in a country school, where the cry is for more time to do things, is suggestive of the fact that the real difficulty too often is poverty of resources. Usually, however, the school routine is followed with a good degree of regularity and relatively little time was noted as lost because of interruptions or variations from a definite routine. Pupils almost invariably left their seats to recite from a recitation bench in front but usually moved promptly though in but few cases with any attention to systematic order, good form and position.

The largest number of recitations noted on any program was thirty-seven, the smallest, sixteen, the latter in a school having but three grades represented. Usually the number varied from twenty-five to thirty-five

recitation periods. The longest time noted for any recitation period was twenty minutes, the shortest, five, either ten or fifteen minutes being the usual allotment, variations depending upon the nature of the subject, the advancement of the pupils and the number of pupils in a class. The present day rural school program varies very little from the typical one room school program familiar to the writer of these notes for a generation. With a general similarity of type, there was noticeable a certain special county uniformity of programs indicating that in most cases their form and order was determined by general or special suggestions from the county superintendent. A few of the older and more experienced teachers displayed special ingenuity and some energy in arranging work so as to keep two or more classes busy in recitations at once. There is very little alternation of classes, though some effective combination of the work of two grades in certain subjects largely in accordance with the suggestions of the Illinois Course of Study. One experienced teacher in a large school alternates certain classes (e. g. history and geography), he thinks successfully, in two week periods, that is, doing the work of the month in each subject in two weeks and so devoting longer time to the daily recitation while the subject is being taken.

This suggests the idea that, if the one room school is to continue, a definite problem suggests itself, and a valuable work may possibly be done by working over its program of study so as to have intensive work in a smaller number of subjects at any given time with longer daily time devoted to each. There is a tremendous amount of waste in the one room rural school under its present organization because of the necessarily fragmentary character of everything that is done. The necessity for the frequent change of attention on the part of the teacher, who conducts thirty recitations daily, the inevitable mental "slipping back" on the part of the

pupil after each days interval, because yesterday's gain was so unappreciable, the absence of opportunity really to guide the pupil in his mental processes because the time is so short, all suggest that perhaps one mistake of the present country school organization is the attempt to be doing all the things all the time instead of doing better a few things at a time with the ultimate result that more is accomplished in all.

There was found in only two or three schools a posted program of study for the pupils, though in a larger number of instances the study program was found recorded carefully in the teacher's register. But little attention is paid to a systematic program for pupils study, save in the assumption that the interval after an given recitation is to be devoted to the preparation for the recitation next to follow.

### SCHOOL ROUTINE AND PHYSICAL CONDITIONS.

With reference to the details of school organization and routine, the degree of precision apparent in a well ordered grade school was noticeably absent. In two schools only the pupils gathered in line outside before opening and at recess and entered in order remaining standing in position until signal to be seated. In five or six observed, they left the room in order, in three instances marching to the music of the organ. As to monitorial work, none was observed, except that in three instances a designated pupil passed the waste basket to all pupils before dismissal. In one case writing material was distributed by pupils and in one it was passed from desk to desk from the rear of the room; usually the collection of papers and distribution of material was attended to by the teacher. These matters may seem relatively unimportant, particularly in a small school, yet as a general impression, the school in which greatest care was exercised in these particulars were schools in which other ideals of excellence were also apparently being best realized. I have noted six schools as characterized by precision and good order in position and passing of classes, thirty-four as indifferent or poor. Very rarely was attention called to position in reading, in rising to recite, or in standing at the blackboard, and in these particulars there were many instances of slovenly, careless and indifferent habits. In a few notable cases that were exceptions, good habits seemed to have been well established so that little stress or direction as to the matter

was apparent.

While speaking of position, it may be interjected here that to the mind of the writer one of the most conspicuous shortcomings of all the schools, is the absence of attention to the physical conditions of the pupils and of any real, systematic or efficient physical training. For this, the rank and file of the teachers at work are not seriously to be criticised. Notwithstanding the commonplace of educational theory, so long reiterated, that education is first physical, physical education in the real sense is not yet a vital part of the educational system. Ideals in the country school as to the general sanitary conditions affecting the school and the health of the pupils are far in advance of those a generation ago. As to the ventilation and cleanliness of the school room, means for preserving uniformity of temperature, adjustment of seats to the size and age of the pupil, purity of water supply, the use of the individual drinking cup, care of the premises, there has been great gain, though ideals and practice are by no means yet completely consistent, but the point of view that a vital element of elementary education is correct habit forming and the use of means for proper bodily development seems not yet to be even remotely established in determining the activities of the school room. In the whole list of visits here recorded, I saw little to indicate any sense of special responsibility for a knowledge of the physical conditions of the indi-

vidual children, an investigation of physical defects, or a recognition of the relations of physical and mental development. Two teachers mentioned the fact that parents had been consulted as to the probable presence of adenoids in the case of their children, and during one of the visits a county superintendent called the attention of a teacher to the case of a pupil where this was the probable difficulty. Early in these visits, the fact that three teachers in succession were wearing glasses, led to a reflection as to the condition of the eyes of the pupils. While no systematic record has been kept, it is safe to say that not more than ten or twelve of the more than eight hundred pupils seen in these visits were similarly equipped, while the peculiar manner of holding the book in reading, hesitation in recognizing word forms, transposition of letters in spelling, and other indications revealed the probability of a great number of cases where eve tests would be of especial value. I called the attention of teachers to several such cases individually. Much in the matter of the investigation of individual physical conditions implies the necessity of expert knowledge and skill, but the average teachers are not vet in possession of any body of intelligent knowledge or any degree of training that leads them to detect even superficial indications of abnormality or defect unless the cases are extreme: and as to the systematic development of bodily powers and habits as mental powers and habits are supposed to be developed through the material and the processes of instruction, there is nothing in the school program curriculum to suggest that that is one of the prime ends of the school. There is no point of attack in any organized movement for the betterment of rural school conditions that seems to me more fundamental, more important or more suggestive of great possibilities in the securing of greater school efficiency than this. No more fruitful line of professional study for reading circle work or as a more definite requirement in the training or certification of teachers can be suggested than a study of the hygiene of the school child and of the relations to each other of physical and mental growth.

## SCHOOL ROOM EQUIPMENT.

It has just been suggested that in the physical conditions of the school room there is a notable advance at least in ideals and standards, if not in complete realization, over the conditions of a decade or two ago. There are old and dilapidated school houses, there are still unattractive surroundings, and unsanitary conditions, but many things of this character that were once the rule are now exceptional. The majority of the schools included in this visitation were not among those recognized as "standard" schools according to the Illinois plan, but the influence of the standardization plan was very evident at least as affecting physical conditions in practically all of the schools. It can hardly be said that the improvement of school room conditions has kept pace with the improvement of the farm home and in more than one case much was left to be desired, but in no school visited, with possibly a single exception, was there entire absence of the evidence of plan for the comfort and beautification of the school room. Many of the buildings were old, twelve had been built from forty to sixty years at least, five others, thirty years or more, and ten more over twenty years. Several of these, where the estimate was indefinite, probably belong to the thirty year group. Only four of the forty school rooms were in any sense modern in plan. These conformed in general to the suggested state department plans. of them the current year is the first year in use. All of the others in shape and arrangement of lighting belong to the "box car" type. Eighteen of the forty are equipped with heaters, generally with accompanying arrangements for ventilation, some have the jacketed

stove, usually placed in the corner of the room, and thirteen, the unjacketed stove. The stoves were usually in good repair, the room comfortably heated and fairly well ventilated. All but two of the schools were provided with bookcase and some library books, the number varying from thirty to three hundred volumes, usually fairly well selected. The evidence of intelligent and systematic use, however, was not always present. Practically all the schools have unabridged dictionaries or provide the pupils with small dictionaries, but there is very little evidence of habitual use of the dictionary or instruction in its use. The school room interiors were usually as pleasant as the age and structure of the buildings would permit. Window shades and curtains in good repair were usual, neat papering, fairly clean walls and some pictures and other decorations common. The school grounds, however, leave much to be desired. Only one school visited had any playground apparatus worthy of mention and that was largely the result of the labor and ingenuity of the teacher and his willingness to spend his own money for the good of the school. The most positive criticism to be made, however, is on the condition of the outhouses. In three instances they were within twenty feet of each other, though usually sufficiently separated; a few of them faced each other, and only five of the party were provided with screens, and only five with good walks from the school house. There was little defacement or vulgarity, and only two or three could be called filthy, but a number of the others were in poor repair and unsanitary and by no means as clean as they should be kept. There was only one really model outhouse and that was equipped with cement floor, easily removable boxes and other desirable provision for cleanliness. In fixing the provisions for a standard school, some more definite requirements and suggestions in this particular might well be made. Whatever the consolidated school may be able to accomplish in the direction of the enlarged school ground and the school farm and garden nothing has yet been done worthy of mention through the one room district school so far as can be judged from the schools included in this report.

## ORDER AND CONDUCT OF PUPILS.

As to the general atmosphere of the school room, order and conduct of the pupils and the relation of teacher and pupils, the conditions observed are, on the whole, such as to give little room for serious criticism. I have attempted an arbitrary classification of the schools visited as orderly and disorderly schools with the result that not more than eight, possibly only five, can be placed in the latter category. I use disorderly in the sense of the presence of any factor in the spirit and conduct of the pupils that seriously or generally disturbs the efficient management of the school. In only one school was there evident on the surface symptoms of an attitude of antagonism on the part of any number of pupils toward the teacher, a trace of the old traditional feeling that a teacher was someone to be resisted; and in this case it seemed not so much personal, as the teacher had evidently been winning favor with the pupils and gaining ground in school control, as indicative of a low community sentiment and based upon parental opposition and I have classified this in the group of disorderly schools though I rate the teacher as one of the better teachers seen not only in quality of instruction but in personality and power of school control. I simply saw her in the process of dealing with a difficult situation. I should expect, if making a later visit, to see a better school. In three other schools, where there was general, concerted and wilful disorder that interferred seriously with the progress of the exercises, it seemed not so much the outgrowth of antagonism as a laxity in the standards of discipline and the taking advantage of

a weak teacher by undue liberty. This found expression in these three schools in continued whispering, audible talking, freedom and noise in moving about, and unnecessary interruptions. There was no apparent insubordination but the teacher did not control. In one of those schools, the teacher had been at work but a short time and was the third teacher of the year, as a preceding teacher, who was followed by a temporary substitute. had given up the school "on account of ill health." In the three or four other schools tentatively classified as disorderly, some of the conditions described above were present but to a less marked extent. In the remaining thirty or more schools, the only disorder noted was occasional whispering, with restlessness, moving noisily in seats, and idleness particularly toward the close of the school session.

In the schools designated as orderly because the general attitude of the pupils was industrious, obedient, and unusually attentive to the business on hand, with little to interfere with an orderly program of school procedure, the most adverse comment to be made is that the order was to so large an extent of a listless and mechanical kind. The children's attitude rarely indicated unhappiness or a sense of irksome restraint, but in probably half the schools visited, the general impression created was that of an attitude of passiveness and unresponsiveness rather than of life and alertness. I have listed five to eight schools as especially good where my notation would be, "Happy, busy and quiet," and perhaps an equal number where it would be, "Happy and busy, but noisy." In this latter class were some that could be rated among the best in the degree of interest shown but in which more or less confusion and noisiness in voice and movement characterized the work. this particular the manner and habit of the teacher frequently determined that of the pupils. It was evident in more than one instance, particularly among the men

whose teaching was observed, that the order or disorder of the school room was almost wholly the reaction upon the school of the teacher's own attitude and mode of behavior.

These observations confirm the generalization that inside of the school room there is but one prime cause of disorder, that is, idleness, or rather the lack of purposeful occupation. While pupils were engaged in recitations. external indications of inattention were very rare. There was not infrequently evidences of indifference, listlessness or lack of responsiveness, but with rare exceptions the attitude of respectful attention and the evident effort on the part of the pupils to meet the requirements of the teacher as well as they knew how. In seat work, so long as the pupils had something to do, they busied themselves in doing it; only when occupation ceased, was there restiveness and disturbance to others. the best tests of the efficient country school is the resourcefulness of the teacher not only in keeping the pupils busy but in giving them occupation that is definitely purposeful and productive of results. among those visited stand out in the mind of the writer as relatively, "best schools" realizing most fully the normal standard of excellence possible under present rural school conditions. An analysis of the reasons for this outstanding impression shows that this factor had an important bearing upon the excellence of each of them. In one of these the most noteworthy feature was the evident care with which all details for pupils' occupation had been planned beforehand, assignments on the board, devices and material prepared for primary pupils, in short, a definite program in the mind of the teacher for the work of the day. In another school, after practically every recitation period, the teacher made a brief, rapid tour of the room. A glance here, a concise suggestion there, a brief inquiry answered, was a material help in concentrating attention and doubtless saved much misdirected energy. This was not the desultory response to the incidental demand of the pupil but a part of the regular routine and was not time lost. In fact, the inquiry may well be raised whether the daily program is not now planned on the wrong basis, as primarily a program of recitations with the work of the pupils secondary and incidental. Ought it not to be rather a program of work with recitation periods incidental?

# THE QUALITY OF TEACHING.

This inquiry suggests the most sweeping criticism that is to be made as to the actual work of nearly all the schools visited, that is that very little teaching is being done, but a great amount of recitation hearing with some effective drill; but teaching in the sense of stimulating inquiry, furnishing motive for spontaneous mental process, developing pupils' initiative, was rare. Almost without exception the attitude of the pupils was a passive one. They responded in many instances with a certain degree of interest to the questions, the suggestion, the initiative of the teacher, but apparently had neither disposition nor opportunity to exercise any degree of initiative of their own. In all the days of visitation. there could be counted on one hand the number of times in which a pupil asked a spontaneous question indicating active thinking outside the limit set in an assigned lesson from a particular text. Neither teacher nor pupils expected such an inovation. Practically the universal point of view was that the purpose—the sole purpose—of the recitation was the testing by the teacher of the ability of the pupils to reproduce an assigned lesson or, as in arithmetic, to perform effectively some particular process or operation.

Both testing and drill have their place, but not the exclusive place that these observations indicate. The blanks suggested for the survey call for an analysis of

"problem lessons." That analysis is easy for it can be as concisely stated as the famous chapter on "Snakes in Ireland." There were none, and nothing approaching any either formally or incidentally attempted. The organization of material in all subjects was practically the work of the teacher or, more frequently, simply the reproduction of the arrangement and organization of the subject matter in the particular text book used. assignment of the lesson for the following day was made almost invariably at the close of the recitation period and was rarely expressed in terms other than "Take the next lesson" or "Study down to-page" or at best, "Take the following topics." A few teachers anticipated difficulties by brief cautions or explanations, but the progressive development of the pupil's thought, because a problem or a project was given him to attack, formed no part of the recitation scheme. As a whole. the teaching of primary grades was better done than that of the upper grades, partly perhaps because the teachers recognized the necessity of organizing material for the beginning pupils independent of text books used. and so put more of their own personality into it. As the grade work advanced, the evidence appeared with greater frequency of slavish dependence upon or adherence to the text book and there was less and less spontaneity or originality. These statements of course are subject to some exceptions vet the impressions, though recorded in sweeping terms, represent accurately the general facts. As to the quality of instruction in particular subjects some detailed observations may be made.

## 1. READING.

Taken as a whole, primary reading is probably better taught than any other subject in the country schools. There is greater evidence than in any other of definite planning for effective drill and greater manifestation of

variety and skill in the drill work done through use of the blackboard, word lists on written and printed cards and other devices for the recognition of words. The word method is almost invariable with early attention to phonic analysis and spelling; and in a number of schools very satisfactory work was seen in phonic analvsis in the first and second years, particularly through the use of similar word combinations or "family groups.' It can not be said, however, that as much attention is paid as should be paid from the beginning to naturalness of expression and to the unobtrusive though systematic corrections of mannerisms and defects of tone. enunciation and position which early are so likely to become fixed habits with children because they are necessarily so completely absorbed in the mechanical processes connected with the recognition of words. The linking of words and thought in spontaneous and natural oral expression was an end secured too rarely in the classes observed, and artificially and unnaturalness all too common. Only one teacher observed made use of "dramatics" or led the children really to feel that they were impersonating the characters as they read their little stories. Two or three, only, sought to secure naturalness by asking the children to think how they would express the idea if they talked. One teacher, who had more than usually good results in expression, required the children to fix the eyes on each sentence and read it silently before attempting to read it aloud. The expression was noticeably better without apparent drill because the attention was not focused on mechanical difficulties. In too large a percentage of the classes visited. however, the impression was left that the teacher's ideal of oral reading was merely the correct pronunciation of words. As a rule, this grew more apparent, the more advanced the class. There was much mechanical, listless and monotonous work, merely the hearing of reading without comment except an occasional interjected correction or perhaps at best the reading by the teacher without comment of a paragraph or even the entire lesson as a basis for passive imitation. Criticisms, when made, were largely confined to the mechanics of reading rather than to the appreciative expression of the thought. Much honest work was done in the way of requiring pupils to reproduce the story or the thought of the lessons read and this was often valuable, both as a language exercise, and as impressing fact and moral values, but there was a general lack of effective linking of thought reproduction with thought development and thought expression. Telling the story or reproducing the thought of the lesson and reading it or interpreting the thought in oral form were usually apparently two distinct and unrelated things. That there should be a larger amount of reading done and more silent reading, more supplementary reading from almost the beginning of the reading course, is a conviction intensified by the observations The mechanical difficulties largely disappear with pupils who have formed the habit of reading much. and this is a ground work, so far as oral reading is concerned, for the development of correct and effective expression.

## 2. ARITHMETIC.

Next in importance to reading, so far as relative time and attention given to it on the school program are concerned, is arithmetic, and, as is the case with reading, probably the primary work in numbers is better done than the more advanced work. There are some outstanding instances of really excellent teaching in arithmetic and others of results apparently secured in spite of the absence of teaching; but as a rule, in the upper grade work in arithmetic the order and selection of material was a matter determined largely by the text book and the usual method of procedure involved close adherence to the book. How far the material was related to the

needs and experiences of the pupils was determined mainly not by the teacher's discrimination but by what happened to be in the book. Difficulties were frequently "explained" by the teacher, but rarely anticipated, and there was very little of progressive development of processes in such way as to lead pupils step by step to the discovery and solution of difficulties for themselves. The usual form of recitation was the assignment of problems. their solution by the pupils, the cheeking of answers as correct with little in the way of explanation or analvsis. Care and attention was frequently given to neatness and arrangement of work. Accuracy of result was often emphasized, but little was required in the way of completeness and accuracy of statement. Arithmetic could be far better taught than it is in country schools, but, on the whole, it receives its full share of attention and averages better than most subjects as to results.

#### 3. LANGUAGE.

The results in language were exceedingly diverse in character. In this subject some of the very best and some of the very poorest work was seen. As in the case of arithmetic, the selection of material and its adaptation to the pupils' needs and experiences was in almost every instance determined by the text book and the suggestions of the course of study. There was a great deal of well selected material and some good organization of it on the part of teachers and pupils; on the other hand, sometimes in grades as low as the fourth and fifth, there was very much barren and profitless work of an abstract character, particularly in some of the formal grammar assignments. Curiously enough—and this observation is not new-some of the grossest violations of correct English usage were those made by pupils or teacher, or both. in language classes and this often without apparent consciousness of the fact by either. One small boy, who was

struggling with sentences with clause subjects, said in answer to a question by the teacher, and she seemed satisfied with the answer, "Them was phrases visterday." When "formal grammar" was introduced or how much it was emphasized depended largely upon the text book used, but there was much of it that, as taught, was "flat. stale and unprofitable," and some of that as ealry as in grades five and six. There was, however, valuable and practical language work done, in two or three schools notably so. As a rule, the methods used were closely suggested by the text books used, too often, painfully and mechanically so, but in an encouraging number of cases with some originality and appreciation. There should be more speaking and more writing about things concerning which the pupils know and think, more connected and complete statements orally given, and in both written and oral work, less repression and more stimulus to spontaneity and originality. There was very little work assigned except as suggested by the text book. I saw nowhere any special recognition of the value of a motive for speaking and writing (e. g. the writing of letters to real persons and actually meant to be read by them) and with one notable exception in one school where in different classes unusual compositions were read by two children of the same family, almost no language work done that indicated that anyone had discovered the joy of creating. In contrast with this one exception was an equally striking case where a boy, who showed some originality and imagination in telling a story suggested by a picture, was repressed and hurt by the abrupt criticism of the teacher that in writing the story he had not followed the suggestion of the book. As to the mechanics of English, what criticism I saw of written work on blackboard and paper was generally commendable in the attention given to accuracy and neatness of form.

## 4. SPELLING AND WRITING.

As to spelling, in the classes observed, about equal attention seemed to be given to written and oral spelling, and the methods followed showed little variation from those that have long been characteristic. Some of the lists of words used were to be criticised as unrelated to the children's interests and remote from their usual vocabulary, but the criticism should apply rather to the text book than to the teacher. Despite the time honored traditions, the utility of spelling and definition as detached and abstract exercises may well be questioned. Habituation to correct form in all writing and appreciation of meaning though actual use are the ends to be desired. Notwithstanding its presence in every school room, the dictionary is really a neglected educational instrument and far more time than is now given should be devoted to practical instruction in its habitual and appreciative use.

Broadly speaking, there is almost no teaching of penmanship in the district. There is a writing period on almost every program, more frequently omitted than any other; and, when used, seems to be more than anything else a time killer. There is the distribution of materials, a little desultory individual suggestion to pupils, a little writing practice in various painful positions, a general sigh of relief when the period is over, and that is all. As the writer does not qualify as a penmanship expert, he has little suggestion to offer, and is almost tempted to believe that the present custom of having a general penmanship period is one almost as much "honored in the breach as in the observance."

## 5. HISTORY AND GEOGRAPHY.

History and geography are both subjects on the rural school program whose teaching in interest and ef-

fectiveness falls far below the measure of its possibilities. In both subjects, I heard little but the very mechanical reproduction of text book epitomes usually extracted from the pupil by a perfunctory question and answer process. A few teachers required topical recitations in history and, in two of the best schools, these were notably in well chosen words and in good form: but there was no evidence of the organization and selection of material on the part of the pupils, comparatively little on the part of the teachers. One teacher in history. read to the pupils supplementary accounts of the topics discussed and showed some good preparation on her own part in comparing the facts brought out, but left little for her pupils to do. Two teachers, in both cases men, linked with a fair degree of skill current events with the work in history and civil government. There were occasional references, usually such as were suggested by the text books, to literary and biographical material from the children's reading, but any real linking of history and geography, history and biography, history and literature was rare. There was almost no history teaching except fact teaching and very little that tended to awaken or stimulate further historical interest or study.

The same general remarks might be made with reference to the teaching of geography. Numberless opportunities were lost, because not realized, to relate detached facts in geography and history, develop ideas of cause and effect, and utilize the wealth of material that gives human interest to these subjects and enlarge the horizon—through geography—of space, and—through history—of time. A single illustration from many may serve to emphasize the point. The lesson was Malaysia. One statement, quoted almost verbatim from the text book and given by the pupil in response to the teacher's question, was, "The Philippine Islands are in southeastern Asia and are the property of the United States." That was all, and that and the few additional facts

about the Philippines seemed to be as remote from the pupils' interest as if the Philippines had been in the moon. How came they into the possession of the United States? What difference has it made to us, commercially, educationally, politically? Who knows anybody that has been to the Philippines? For one, who sees all the relations of the simple statement quoted, what a wealth of opportunity here to open to those children the whole vista of world relations. Beginning with the Spanish-American war as a core, how much of world history might have clustered about the lesson, and what an awakening and broadening of interests in those growing minds might have dated from that day. The reason that that and similar opportunities were lost, lies in the limitation of the knowledge, the narrowness of the vision and the poverty of the resources of the teachers themselves

# 6. PHYSIOLOGY, NATURE STUDY AND AGRICULTURE.

To an even greater extent there is inadequacy and lack of satisfactory results in the teaching of elementary This applies to work in physiology, nature study and agriculture that have a nominal place in the rural school program but in practically all the work seen have advanced very little beyond the "book fact" stage and, unless it be with rare exceptions, are not yet taught in the country school so as to guide the child into a vital and real knowledge of his physical environment. In answer to the question, "What are you doing in your work in agriculture?" the usual answer was, "We are following the outline and learning the facts suggested in the course of study." A little seed testing and corn scoring is about the extent of the practical work. In one county, I found several schools in which there was elementary work in domestic art. I found manual training in none.

unless the paper cutting, weaving and basketry of the primary grades may be so called.

#### THE TEACHING FORCE.

One important general topic vet remains, the qualifications, training and experience of the teachers visited. The forty teachers include thirty-four women and six men. In two of the counties visited. Boone and Mc-Henry, there were no men engaged in teaching in one room schools. Roughly speaking, the farther south you go in Illinois, the proportion of men in the country schools increases. The average age of the thirty-four women in the list is a little less than twenty-two, of the six men forty-two years. The youngest of the women is eighteen, the oldest twenty-nine. Seven were in their first year of teaching, eight have taught two years, seven, three years, five, four years, one, five years, one, seven vears, one eight years, and one, ten years. The youngest of the six men was twenty-eight, the oldest fifty-nine and they had taught respectively ten, fourteen, fifteen, twenty-one, twenty-five and thirty-eight years. of the women began their teaching before they were twenty, the voungest in her sixteenth year, most of the others in their seventeenth and eighteenth. Perhaps more suggestive still are these figures as to tenure. Twenty-four of the forty teachers were teaching for the first year in their present positions, ten for the second year, two for the third year, three for the fourth year, one for the sixth. How much of efficient consecutive work can be done, how much community interest can be developed on that basis of tenure.

As to the scholastic training of the group, twentyfour are reported as high school graduates, two, not graduates, had two years of high school work and one three, one had the equivalent of high school work in a normal model school, the others had elementary preparation, in most instances, combined with some desultory academic, normal or collegiate work. Two of the forty were normal school graduates, I think, beginners, and fifteen reported attendance on summer or short term normal courses varying from six weeks to a semester. The country schools, it will be seen, are, as a rule, in the hands of inexperienced girls, varying in age from seventeen to twenty-two, who teach from one to five years, usually now high school graduates but without professional preparation, and without the outlook or knowledge of life that makes them really sufficient for their important task. The men remaining in the rural teaching field are usually more mature, with the skill and strength that comes from experience, but usually with desultory and inadequate academic preparation. As a class, I do not believe that there is anywhere a more earnest and conscientions body of people than the present day rural teachers, and their fidelity to duty, their ideals of character and the intensive work they do, even though in a narrow field, enable them to produce results really of much greater significance and value than a critical analysis of conditions would seem to justify. The rural schools are not living up to the measure of their possibilities under their present organization. They are not adequate for the new needs and new tasks that are before them. They have not failed in the past. They are not moribund and not even decadent now. They are simply feeling the stirrings of a new and expanding life.

## CONCLUDING SUGGESTIONS.

To make them what they ought to be, there must be some radical changes, some radical steps in advance.

What are some of these steps?

1. The substitution of a larger unit of administration for the present small independent district or at least the elimination of one element of wastefulness by the discontinuance of a great number of smaller schools. The larger unit is not in itself the panacea for the ills of the district school, if that were the only change, many of them would continue, some, it may be, in aggravated form; but our present district machinery constitutes an uneconomical and antiquated system that involves, perhaps, the maximum of inefficiency. The district school is the old miscellaneous general store; modern methods are driving it out and reorganizing, as in the department store, on a new basis of consolidation and classification. This study has purposely been confined to conditions inside the school room. No attempt has been made to include community conditions; but in every county striking instances obtrude themselves of localities where changing population has made the once large rural school a lonely place and where teachers near each other are working with one, two and three pupil classes to great disadvantage; and the only reason why obviously needed changes are not affected is the inertia of rural sentiment. But more than economy of organization is involved. The larger unit is needed in order that there may be a really adequate community unit for working out the social changes for which the new rural school must be the center. The consolidated district with the community school graded, organized and equipped especially for rural needs, with the possibility of teachers. specially trained, with adequate salary and prolonged tenure, living and working among their people as an integral part of the community life, is the ideal to be reached. By whatever route this ideal is reached, it ought to come soon, sooner far than merely sporadic or local effort will bring it. Meantime let the building up of community sentiment and the incidental bettering of conditions in the schools as they are continue. The old school houses that are wearing out ought not to be replaced by others like them or even approximately so. The school farm and garden, the playground, the hall, the library, the workshop, the kitchen, the gymnasium must all grow into the rural school ideal. To reach this

end, state and local community must cooperate.

2. Closer and consequently more efficient supervision. A somewhat intimate knowledge of school conditions in several states justifies the observation that the county superintendency in Illinois approaches more than in most states the maximum of realizable efficiency. The four year term, the well established precedent for several reëlections, the well organized state course of study, the generally established system of uniform examinations give the county superintendent possibilities of real power which on the whole is judiciously and helpfully exercised. Under present conditions, the most powerful agents in determining the content, order and methods of instruction in all the district schools are the text books in use and, supplementary to the printed course of study, the suggestions, plans and requirements of the county superintendent. In every county, the personality and ideals of the county superintendent were in evidence in the type of work done in the school room. yet, after all, his is largely, in the nature of the case, an office supervision. Visits are relatively infrequent and can at best be but casual and advisory. It is little wonder that results are no better, the wonder is, that they are as good as they are, when we consider the magnitude and variety of the problems that must daily be met by a young inexperienced teacher who must take the initiative in so many things without immediate direction and in the majority of cases with absolutely no preliminary consideration of the nature of the problem involved. The administration and supervision of a school system of twenty teachers, usually specially selected and experienced, with all the advantages of compact organization will occupy the full time of a school expert as superintendent: a county like Champaign imposes upon the superintendent and his deputy not only all the office administration but the supervision of two hundred working in one room schools. The city graded school has expert supervision of music, of drawing, of manual training, of physical training and work in other special lines; the country, none of these. Even with other conditions as they are, no more judicious expenditure could be made in every county than that of a few thousand dollars for the organization of a field force of experts, several times as large as at present, to take care of these special lines of work and to organize the teachers into smaller groups for direct and immediate supervision. It would be a wise investment based on good business principles to double the working value of the money already invested in the schools by this relatively small additional expenditure. Until we can get better trained teachers, this would be the quickest way to better results with those we have

The final and most important consideration is The betterment of the rural school in the last analvsis rests with the rural school teacher. A broadly cultured, thoroughly trained, enthusiastic man or woman with teaching power could work wonders with any group of children in any school whatever the equipment. The rural school must have better trained teachers and is entitled to the best. They should be of the country. living and working in the country, fitted for rural leadership and real participants in rural life. Of course, the conditions for rural teaching must be made such as to attract and content such teachers for permanent service with prolonged tenure and adequate pay in livable surroundings and with incentives to work out real problems worthy of their best professional ambitions. With the chance to work out such problems leaders will develop, but meantime the professional standards for the rural teaching rank and file must be raised as rapidly

as circumstances will permit. In this work the leadership ought to rest with the normal schools; but the normal schools are not sending their teachers into the country, and in the nature of things, under present conditions they cannot to any great extent. The writer believes that the first practical step toward the attainment of this end lies in the organization of a system of elementary teacher training though an agency already at hand —the local high school. If a plan of cooperation between county superintendent and high schools could provide one or more demonstration schools in each county where well trained normal teachers could practically work out ideals under real and average conditions, there would inevitably be a gradual but general raising of the tone and spirit of the entire system. This is feasible as an immediate step and the most direct practical work of the normal schools in connection with the rural schools should be the training of leaders fitted to cooperate with experienced teachers in the field in working out and realizing in practice the details of such a plan. In the immediate future, the most promising field of service for the teacher, fitted to do constructive work and wishing to realize a fruitage of large results, is the rural field. Like Antaeus of old, this giant civilization of ours must still renew its strength by touching its feet to the soil.



















Educat.

150510

Author Coffman, L. D. Fitle Illinols School Survey.

University of Toronto Library

DO NOT REMOVE THE

CARD

FROM

THIS

POCKET

Acme Library Card Pocket
Under Pat. "Ref. Index File"
Made by LIBRARY BUREAU

